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REMEDIAL PROJECT MANAGERS' MEETING

NASA/JET PROPULSION LABORATORY

20 June 1997

ATTENDEES:

Jon Bishop, RWQCB-LA

Charles L. Buril, JPL

Mark Cutler, Foster Wheeler

Richard Gebert, DTSC

Vitthal S. Hosangadi, Foster Wheeler

David M. Klimberg, Foster Wheeler

Debbie Lowe, US EPA

Stephen Niou, URS

Judith A. Novelly, JPL

B.G. Randolph, Foster Wheeler

Peter Robles, Jr., NASA

Roberta Smith, US EPA

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Reported by: Louise K. Mizota, CSR 2818

Pasadena, California

20 June, 1997

10:07 A.M.

BURIL: Welcome, everybody.

And, Debbie, this is your last one for a while.

LOWE: Yes.

BURIL: Goodness. We're going to miss you. You better send us a postcard from Beijing or something like that.

The first thing on the agenda here is Project Schedule Modification, but I know that -- this is kind of a sidetrack for just a moment. I guess Hedy is not going to be stepping in on the project. Have you folks been able to determine who will be filling in?

SMITH: The short answer to that question is no. The longer answer to that question is that I'm interviewing candidates, not just for NASA/JPL but also for Hedy's sites. I'm trying to come up with a good match.

So my hope is that I'll have somebody in place within a month.

BURIL: Okay. Great.

1       SMITH: One of the other options we're  
2 entertaining are IPA options, and those take longer  
3 to manage.

4       BURIL: IPA meaning?

5       SMITH: Interagency personnel agreements, so  
6 that we can get an experienced project manager to be  
7 a component from another agency.

8       BURIL: When you said IPA I thought isopropyl  
9 alcohol, and I didn't think that was right.

10               I have a copy of the schedule as it  
11 stands -- I'm sorry. Not everybody knows everybody.  
12 I just assumed that automatically. Why don't we  
13 start at that other end of the table. David, do you  
14 want to start off and introduce yourself and why  
15 you're here.

16       KLIMBERG: I'm Dave Klimberg and I'm with Foster  
17 Wheeler. I'm our California operations manager.  
18 I'm working with Mark Cutler.

19       CUTLER: You know me. Mark Cutler, with Foster  
20 Wheeler.

21       ROBLES: Peter Robles from NASA Management  
22 Office, the RPM for this site.

23       BURIL: Chuck Buril, JPL Environmental Affairs  
24 Office.

25       NOVELLY: Judy Novelly, JPL Environmental

1 Affairs Office.

2 SMITH: Bobbye Smith, EPA Region 9, Section  
3 Chief for the Air Force DOE Department of Energy.

4 LOWE: Debbie Lowe, U.S. EPA.

5 NIOU: Stephen Niou, URS.

6 GEBERT: Richard Gebert, Project Manager for  
7 DTSC, Department of Toxic Substances Control.

8 BISHOP: Jon Bishop for the Regional Water  
9 Quality Control Board.

10 BURIL: What I'm passing out -- for some reason,  
11 my secretary put names on all these. I am going  
12 along and handing them out according to the names  
13 here.

14 ROBLES: She wanted to give it that personal  
15 touch.

16 BISHOP: Got the name right, too. That's  
17 impressive.

18 BURIL: Anyone who doesn't have a name, I have a  
19 few blanks.

20 What we've done with this schedule is that  
21 we've taken into account the schedule move-ups that  
22 we were able to accomplish as a result of our good  
23 fortune in the field with Operable Unit 2. We were  
24 able to move that up by, I think it was about three  
25 months or so. It may have been more. I'd have to

1 go back and doublecheck.

2           We've also identified a schedule to get us  
3 to interim ROD for Operable Unit 3. Now, we did not  
4 try to go beyond interim ROD in this schedule. We  
5 only went up to that point. That actually took just  
6 about a year off of the overall OU-3 schedule to get  
7 to a ROD document.

8           So basically, hopefully you've had an  
9 opportunity to look at this. I think we sent it out  
10 about, what, a week or so ago. I'll just throw the  
11 floor open to anyone who has any questions, comments  
12 about the schedule as it stands.

13           Again, this is based on one of those  
14 65-page nightmares that you've seen in the past.  
15 This is all the finish dates regarding document  
16 delivery. I did not include the monitoring program  
17 information on this. This is all the deliverables  
18 that would be required under the FFA.

19           Anyone who wants to look at that 65-page  
20 nightmare, I've got a copy of it here. But I don't  
21 have all the pages of it. Basically, it goes  
22 through all of the same steps. Some of the steps  
23 were shortened as a result of the things that we  
24 identified already. It basically goes through all  
25 the same steps that we've discussed in the previous

1 schedules.

2       LOWE: Chuck, I thought we had talked about  
3 either starring or bolding the primary documents.

4       BURIL: I believe all of these are primary.

5       LOWE: I thought we decided the risk assessment  
6 was not.

7       BURIL: No, I looked back in the FFA. It is a  
8 primary.

9       LOWE: Oh, okay.

10       BURIL: I think that other than that one, I  
11 think the question is answered for us.

12               Now, I assumed that having a ROD, an  
13 interim ROD would actually be a primary kind of  
14 document.

15       LOWE: Yes.

16       BURIL: So I did not identify that in any other  
17 way.

18       LOWE: Can you talk about why the draft FS OU-3  
19 report is coming out so soon after the RI report? I  
20 think it's like three weeks.

21       BURIL: Basically, we're looking at the report  
22 as being able to be done concurrently with the RI.  
23 Since we're talking about utilizing the existing  
24 treatment capacities, and so forth, and making the  
25 evaluation based on that, as well as all the other

1 criteria that are built in, it allows us to move  
2 forward now as opposed to waiting until after we  
3 make a determination that other treatment systems  
4 may be more appropriate. So we're cutting down the  
5 amount of work that we have to do in that regard and  
6 so we're able to provide that a little more rapidly.

7 SMITH: How are you going to address the  
8 question of public comment on the RI document with  
9 only a couple of weeks? Don't you have built in a  
10 public comment period?

11 BURIL: The only public comment period that we  
12 have built in throughout the project is for the RODs  
13 themselves.

14 SMITH: Proposed plan.

15 BURIL: Excuse me. The proposed plan. That's  
16 correct. Yes. Proposed plan.

17 SMITH: Okay.

18 BURIL: And those are built in -- I'm just  
19 looking at it now. If I can find it for OU-3.

20 CUTLER: I think part of it, too, Debbie, the  
21 document you handed out about the presumptive  
22 remedies, the identification in the screening part  
23 of the FS is basically done. That's what we  
24 understood. Eventually, we want to get into this  
25 discussion of what you'd like to see in the FS maybe

1 a little bit later in this meeting. But we felt  
2 like at least half of it might have been done  
3 already. It's just a matter of using the existing  
4 data and going. Maybe there's something we don't  
5 realize.

6 BURIL: That might be part of what we might want  
7 to discuss today.

8 Bobbye, to answer your question directly,  
9 we have public involvement for Operable Unit 3  
10 starting almost a year from now and lasting for a  
11 30-day comment period. That's not shown here.  
12 These are only the deliverable dates. I don't know  
13 whether you've seen the detailed schedule that we  
14 have for the variety of facets of this, but this  
15 is --

16 SMITH: I'll get one.

17 BURIL: -- the overall one. If you want one  
18 that matches this, I'll have to provide it to you  
19 because the old one doesn't match this. This is the  
20 newest one based on the move-up of Operable Unit 2  
21 and the interim ROD for Operable Unit 3.

22 SMITH: Yes, I'd like an updated one.

23 BURIL: You'd like a copy of this? Sure.  
24 That's no problem.

25 LOWE: So why is there almost two months between

1 when the draft-final OU-3 FS is submitted to when  
2 the draft proposed plan is submitted?

3 BURIL: That is the same kind of time frame, I  
4 believe, that we had for all of the other documents.  
5 Let me just verify that.

6 You're talking about from draft-final FS  
7 to which, again?

8 LOWE: The draft proposed plan submittal.

9 BURIL: Well, if you look, again, this is just  
10 taking it a step at a time in making the three  
11 operable units basically work the same.

12 If you look in Operable Unit 2, you see  
13 submit the draft-final FS is for the 8th of  
14 September, and then the submission of the proposed  
15 plan is the 4th of November. So basically, a  
16 two-month spread. So it follows from that  
17 standpoint. It's our best guess of what's going to  
18 be required based on all the individual pieces that  
19 are already built in.

20 LOWE: It's my philosophy that your proposed  
21 plan is just a very brief summary of what you have  
22 in your feasibility study. I mean, you're  
23 identifying your proposed alternatives in there.  
24 We'll probably come to consensus on what our  
25 recommendation is here, and then your proposed plan

1 is going to be like a five-page public document that  
2 shouldn't be very difficult to prepare. And I think  
3 that could be coming out much sooner after the  
4 draft-final.

5 CUTLER: I think, too, this is submit the  
6 draft-final for NASA and agency review. I think  
7 there's 30 days in there for the review cycle before  
8 it goes final.

9 LOWE: Okay.

10 CUTLER: So that might be part of that  
11 two-month, to get to the final document.

12 LOWE: Okay. Well, I mean, unless we're  
13 expecting to have massive comments on the  
14 draft-final, which I hope is not going to be the  
15 situation --

16 BURIL: No, I'm hoping not.

17 LOWE: -- you can pretty much expect what comes  
18 out in the draft-final is going to be what you're  
19 going to be putting in the proposed plan. So I  
20 think as soon as you get your draft-final out you  
21 can start drafting your proposed plan.

22 BURIL: Well, in fact, that's what we've  
23 identified here. We submit the draft-final FS for  
24 concurrent NASA/agency review on the 26th of March,  
25 and we begin our work on developing the proposed

1 plan that next day.

2       LOWE: I think it should take someone about a  
3 week to write it. Someone sits down and writes it  
4 for you.

5       BURIL: You've got to realize we've got a review  
6 period here at JPL that is something that I don't  
7 have the mechanism to circumvent, is we have a  
8 review and comment and incorporation of our comments  
9 before we submit it to you and NASA for review. And  
10 that's a month long.

11       LOWE: Okay. So that happens for OU-3 before  
12 the 26th of March. Right?

13       BURIL: No. That happens after because we have  
14 to start -- we don't start the work on compiling and  
15 submitting the draft plan and pulling it together,  
16 we don't start that until the 27th of March, which  
17 is after the draft-final FS has been submitted. I  
18 mean it's the next day after submission.

19       LOWE: So after Foster Wheeler prepares the  
20 proposed plan, JPL needs 30 days to review it before  
21 it can be released to the agencies?

22       BURIL: That's correct.

23       LOWE: And that's because it has to go through  
24 legal review and that kind of stuff?

25       BURIL: This is all the things that deal with

1 the contractual issues. Cal Tech is basically  
2 wanting to be sure, as NASA's contractor, that we  
3 are assured of giving them a product that can be  
4 utilized immediately without any problem. And, in  
5 fact, that's why we've gone to the concurrent agency  
6 review. Peter has something I view as a fair amount  
7 of confidence in our ability to hand documents  
8 capable of being reviewed without an independent  
9 NASA review first, which is how we did it before, if  
10 you recall.

11       LOWE: So your contract says you need 30 days to  
12 look at something before it goes out to the agency.

13       BURIL: The contract doesn't say that, but the  
14 management at JPL says that that's what's going to  
15 happen.

16       LOWE: Does the management of JPL understand  
17 that some of these documents are going to be like  
18 six volumes long and that this will be something  
19 like less than ten pages?

20       BURIL: I don't know that that would be an issue  
21 for them, to be honest with you, because it does  
22 take time to get things coordinated.

23               I mean, in all honesty, this is no  
24 different than the schedule that we had before. I  
25 guess it was approved, in essence, in terms of

1 moving on with the work. This is the same kind of  
2 time frame, the same review cycle, the same time  
3 frames and review cycle that we have talked about in  
4 the past.

5       LOWE: It just seems like someone could look at  
6 something that's ten pages in a week or two rather  
7 than 30 days, I mean, especially since it's going to  
8 be the same recommendations that are in the  
9 feasibility study. The feasibility study, by the  
10 time it comes out draft-final, is going to recommend  
11 the proposed remedy. So the proposed plan is merely  
12 a summary of that information in ten pages instead  
13 of two volumes. So it's not going to be any new  
14 information other than announcing a public meeting  
15 date and place.

16       BURIL: Well, I'll give you an example. We're  
17 only talking about a three-week review time at JPL.  
18 That's all. And that's actually less than what  
19 we've taken at other locations where the larger  
20 documents are.

21       LOWE: You just said three weeks. Before you  
22 said 30 days.

23       BURIL: Let me finish. But then we take a  
24 two-week time frame to allow Foster Wheeler to  
25 incorporate it, reproduce it, get it ready to be

1 submitted on the appropriate date. So there you're  
2 talking basically 30 days, because some of those  
3 overlap.

4 GEBERT: I have a question on page 3 there  
5 between the five-month time interval between the  
6 submission of the draft ROD to the submission of the  
7 draft-final ROD. This seems like a long time, like  
8 Debbie was saying, for a relatively small document,  
9 to have five months. Is that for review time?

10 BURIL: That's something I'll have to check.  
11 Hold on just a second. Let me get that.

12 So we submit the interim OU-3 --

13 GEBERT: The interim ROD December '98.

14 BURIL: Right. There is a mandatory two-month  
15 time frame for concurrent review. That's  
16 established by the FFA. That's two months of that.

17 Then you're talking about a 30-day time  
18 frame to allow us to get comments incorporated, put  
19 it back in, which is also mandated by the FFA, then  
20 a 30-day time frame for the finalization process to  
21 take place.

22 So all these time frames are actually  
23 called out in the FFA. We're not taking anything  
24 long, because those are drop dead dates. You've got  
25 60 days to do this, 30 days to do that, 30 days to

1 do that. And that's where those are coming from.

2 GEBERT: If we get our review done earlier,  
3 though, we can get it moved up.

4 BURIL: I'm very uncomfortable in saying that we  
5 would do that unless we literally put it in writing  
6 and held you to it. That would be a possibility, I  
7 suppose. But I wouldn't want to try and shortchange  
8 the agencies if there is something that you want to  
9 be able to take time with, or if something else  
10 steps into your schedule that you need that time  
11 that's allowed, I didn't want to take it away from  
12 you without discussing it first, which I guess we  
13 could do.

14 GEBERT: So it's two years, basically.

15 BURIL: Two years to get to that, where the  
16 original schedule was three.

17 Anybody else have any comments, questions?  
18 I hope I have answered your questions.

19 Then Debbie gave us a call and suggested  
20 that we have a consensus statement regarding the  
21 schedule available for us here at this meeting so  
22 that if you're comfortable with what's presented,  
23 then we could sign that and call this as being  
24 official and this would now be part of the FFA and  
25 would be enforceable under the FFA from this point

1 on.

2 I have such an agreement here. I don't  
3 know if you folks want to take a minute and look at  
4 it, talk amongst yourselves, do whatever. It is  
5 available here. I'm hopeful that we might be able  
6 to go ahead and sign this thing, because we are  
7 moving on this schedule. We have already begun a  
8 large amount of work based on this schedule. In  
9 fact, we've got the conductor casings for all three  
10 monitoring wells in place. And the main rig is  
11 being set today, I think, isn't it, Mark?

12 CUTLER: They're going to start drilling today.

13 BURIL: They're going to start drilling today.

14 What well number is that? 24?

15 CUTLER: 24.

16 BURIL: Thank you. That's the one up by  
17 Building 79, which is the one that we're putting  
18 deep to be able to determine depth of contamination  
19 at what we think is our hot spot.

20 So we're moving forward. Things are  
21 looking good right now. So if we're going to need  
22 to change the schedule, then I think we need to  
23 discuss that.

24 Also, there are some issues here that I  
25 think we probably would like to talk a little bit

1 about to be sure that you're aware of them and then  
2 also see what potential impact you might think they  
3 have on the overall project. So rather than push to  
4 have you sit up and sign this right now, I think  
5 maybe it might be good for us to talk about some of  
6 those other topics, be sure that you're  
7 understanding everything that's going on here and  
8 that's been requested of us. And then, if you'd  
9 like, maybe at lunch time or whatever, you can take  
10 some time to talk amongst yourselves and decide how  
11 you want to approach this.

12 Let me go ahead and just ask you to put  
13 that one aside.

14 I'm going to take this slightly out of  
15 context because there has been something that came  
16 up even since the agenda was sent out that I'd like  
17 to put in front of you. This may have an impact to  
18 the project as a whole, particularly the feasibility  
19 section, because of the change that it imposes.

20 What I've got here is something that comes  
21 from the Department of Health Services. I took this  
22 off their Web page, by the way.

23 About two weeks ago Peter was contacted by  
24 a representative of DHS.

25 ROBLES: Mr. Shafer.

1       BURIL: Apparently, they have discovered a new  
2 potential concern at locations where rocket fuels  
3 might have been used. And they describe the Rancho  
4 Cordova site that is in Sacramento. Apparently  
5 perchlorate is an issue for those areas which may  
6 have potentially used rocket fuels or were involved  
7 in the development of rocket fuels.

8               Now, we've been contacted by Mr. Shafer at  
9 DHS, and he asked us to split sample all of our  
10 wells that we are currently sampling under our  
11 normal monitoring program. And we have agreed to do  
12 that without any question.

13              They are going to be analyzing those  
14 samples at DHS' lab up in Berkeley. Now, we've also  
15 contracted with a lab to go ahead and have that same  
16 analysis done on our samples.

17              Two things that jump up at this. First,  
18 from a --

19       GEBERT: Excuse me, Chuck. That was split  
20 samples on all the wells?

21       BURIL: All the wells, all the screens. Every  
22 one of them.

23       CUTLER: That sampling started last Monday and  
24 will last for probably another three or four weeks.  
25 So we're collecting them right now and splitting

1 them.

2       LOWE: Do you know if they're also going to  
3 sample the City of Pasadena wells?

4       BURIL: Actually, they already have and they've  
5 already received the results back.

6               I found this out through a meeting that we  
7 had with the Lincoln Avenue folks in dealing with  
8 our settlement agreement with them. What they told  
9 us at that meeting is that both Lincoln Avenue and  
10 Pasadena have sampled. The Lincoln Avenue wells  
11 showed concentrations up to 7 parts per billion of  
12 perchlorate. And DHS has established a goal, I  
13 guess you would call it. It's not an MCL. It's an  
14 action level --

15       GEBERT: Applied action level.

16       BURIL: That's it. -- of 18 parts per billion.  
17 So it doesn't appear to be an issue for them.

18               However, in three of the Pasadena wells,  
19 we had concentrations which were below the 18 parts.  
20 But in one of the wells, and they did not know which  
21 one, and I have yet to find out, the concentration  
22 was in the 40s, which was obviously above the action  
23 level.

24               Reportedly, based on, I guess, a  
25 conversation that Lincoln Avenue has had with the

1 City of Pasadena, they now have to operate all four  
2 of their wells simultaneously to ensure that their  
3 water that is sent to their customers has been  
4 blended to such a degree that it drops below the 18  
5 parts per billion action level.

6 Part of the concern with this is, one, the  
7 analytical work that we're doing currently. I want  
8 to be sure that you're aware of the situation there.  
9 There are no certified labs for perchlorate  
10 analyses. The work is ongoing with DHS to have labs  
11 certified, but currently there are none. The lab  
12 that we're planning on using is number one in line  
13 for the certification sample. So we're hopeful that  
14 by the time we actually get to doing our analysis,  
15 they will be certified.

16 This compound, anecdotally, is a very  
17 stable compound. You'd think it would be kind of  
18 unstable. Well, it's not. It's very stable.  
19 They've identified a 28-day holding time for the  
20 sample. So in that 28-day holding time we're  
21 hopeful that the lab will go ahead and get their  
22 certification, and then they'll run our analyses  
23 under being certified.

24 CUTLER: Right. It's not quite certified in the  
25 sense of the regular DHS certification. They're

1 calling them approved labs.

2 BURIL: Yes. Yes. That's right.

3 CUTLER: What they're doing, they're just giving  
4 them a blind sample. If they get close to what's  
5 actually in there they'll call them an approved lab.  
6 They say there's no regulation. You don't have to  
7 use an approved lab. They're just doing this as a  
8 courtesy call to labs, they were saying. But we're  
9 going to try to use a so-called approved lab.

10 GEBERT: Right. It's my understanding if a lab  
11 is approved for EPA Method 300 using ion  
12 chromatography, if they're approved for that method,  
13 then they can do the test on the ammonium  
14 perchlorate, because they're quite similar.

15 CUTLER: They just need a different column or  
16 something.

17 GEBERT: Right. Because the tests are quite  
18 similar.

19 BURIL: That's good news. The 300 series is a  
20 series of inorganics, isn't it?

21 GEBERT: Right. It's inorganic analysis using  
22 ion chromatography.

23 CUTLER: Montgomery I think is like second in  
24 line. We have a plan -- APPL Labs is first in line  
25 to get one of these blind samples. And if we run

1 into holding times they are more likely to be  
2 approved before Montgomery, so we'll ship the  
3 samples through Montgomery to APPL. But if  
4 Montgomery gets their blind sample, it's scheduled  
5 for next week, then we'll just use Montgomery.

6 But the guy, I guess his name is Richard  
7 Spinner, right from DHS, the accreditation program  
8 says you don't even have to do this.

9 GEBERT: Right.

10 CUTLER: The approval is not necessary at this  
11 point, but we're doing it. We want to use an  
12 approved lab.

13 BURIL: So we're in the process of having the  
14 samples collected and analyzed right now.

15 Now, another confounding thing that I want  
16 to be sure that I pass along to you that was  
17 provided to me at the Lincoln Avenue meeting is that  
18 the Lincoln Avenue folks, who currently have a  
19 carbon sorption system on one of their wells, tested  
20 both the influent and effluent from that system with  
21 no change in the perchlorate concentrations  
22 whatsoever.

23 SMITH: That does not absorb into carbon.

24 BURIL: No. And we have also heard that they  
25 have sampled at the Pasadena plant on the influent

1 and effluent, and it went through unchanged. So it  
2 is not stripable. It is not absorbable.

3 SMITH: Right. Not with carbon.

4 BURIL: Yes, not with carbon. So from that  
5 standpoint there may be a different issue to deal  
6 with than what we currently have been led to  
7 believe.

8 We've already been talking with Foster  
9 Wheeler about it. One of the things that came out  
10 was the potential for maybe UV ozonation as being a  
11 possible treatment approach.

12 SMITH: The Air Force has this problem at Mather  
13 Air Force Base, near Norton, and a number of other  
14 Air Force Bases.

15 Before you send Foster Wheeler off, I  
16 suggest that they communicate with the Air Force  
17 Center for Environmental Excellence because at this  
18 point there is no known remedial off-the-shelf  
19 technology that works for perchlorate. The proposed  
20 technology that the Air Force is looking at is \$400  
21 million a crack, and it's only at the bench scale  
22 stage.

23 So perchlorate is having a significant  
24 impact on the strategy for cleanup at Air Force  
25 bases and GOCOs throughout the United States.

1       ROBLES: Also, at Norton when they try to find  
2 the perchlorate after they found it, it disappeared.  
3 It moves.

4       SMITH: It's extremely soluble.

5       GEBERT: It's very soluble, and it's also very  
6 mobile.

7       ROBLES: They tested it and found it at high  
8 levels and when they went back, it was gone. And  
9 now they're looking for it. It's like a needle in a  
10 haystack.

11       BURIL: It's stable in the environment, very  
12 mobile, very soluble.

13       ROBLES: And it moves all over.

14       BURIL: It's beginning to sound more like  
15 benzene, except that benzene you can treat.

16       ROBLES: It's very hard.

17       CUTLER: Or like MTBE.

18       BISHOP: So is the technology that they're  
19 looking at at other places pretty much containment,  
20 then?

21       SMITH: Yes. At this point the Air Force is  
22 working on a paper that they're going to submit to  
23 agencies throughout the United States, and at least  
24 in the short term what we may be looking at is the  
25 Air Force considering drilling wells to replace

1 water supplies in other areas and abandoning in  
2 place. And you Water Board folks are going to see a  
3 lot of requests for containment zone until the  
4 technology -- basically, an interim solution.

5 BISHOP: If you can't treat it and --

6 SMITH: Until there's a viable treatment  
7 alternative, you may be asking -- you may be having  
8 lots of requests for containment zone.

9 BISHOP: Has there been any discussion, I know  
10 this is kind of off the point, but of what to do now  
11 with that water, because containment is not --

12 BURIL: It's actually very on point because  
13 we're going to have that same problem, potentially.

14 SMITH: There still is the issue of hydrologic,  
15 can you hydrologically contain an area. And it  
16 doesn't --

17 ROBLES: Doesn't appear to be, according to the  
18 Air Force Center for Environmental Excellence. It  
19 appears you cannot control perchlorate. You can't  
20 contain it because of its solubility. It's becoming  
21 a real problem.

22 SMITH: Again, I wasn't made aware of that  
23 specific issue. But if one is dealing --  
24 theoretically, if one is dealing with hydrologic  
25 containment, that means that one is dealing with not

1 allowing things to --

2 ROBLES: Get off the site.

3 SMITH: -- get off the site. So I'm not ready  
4 to concede that it can't be hydrologically contained  
5 yet.

6 BURIL: But it is difficult.

7 ROBLES: It means you've got to pump up every  
8 drop of water getting across your boundaries.

9 SMITH: It means that you have to have good  
10 containment.

11 BURIL: You change your approach.

12 BISHOP: You change your gradient so it's inward  
13 at all spots. It's not pulling all the water.

14 BURIL: Of course, when you're talking about an  
15 aquifer that has a relatively prolific capability,  
16 such as the one we're sitting over right now, that  
17 could be a tremendous amount of water.

18 BISHOP: That's right.

19 SMITH: But just to let you know, this is a  
20 pervasive problem, and your cooperation and response  
21 in terms of doing the data analysis is absolutely  
22 crucial in terms of being able to help develop  
23 strategies for dealing with this problem throughout  
24 California.

25 BURIL: I think I can speak for Peter when I say

1 we're more than happy to assist in whatever way we  
2 can.

3 I guess the immediate question, though, is  
4 given a worst-case scenario, and I tend to be a  
5 devil's advocate in looking at these things, given  
6 the worst-case scenario, where we are going to be in  
7 a position of having to contain a large area of a  
8 fairly prolific aquifer, has there been any  
9 discussion within the Air Force about what do you do  
10 with the water that you do take out of the ground?  
11 Because if you're unable to treat, you end up with  
12 hundreds of millions of gallons of an untreatable  
13 waste relatively rapidly.

14 SMITH: With hydrologic containment, the goal  
15 would be to, in fact, isolate portions of the  
16 aquifer and not -- using reinjection so that you  
17 reinject and you're isolating components of the  
18 aquifer in place. Again, I'm --

19 BURIL: Sure. That's the next reasonable step,  
20 obviously, is if you can't take it out, you've got  
21 to put something in to block it off.

22 KLIMBERG: What are the natural degradation  
23 characteristics for it?

24 SMITH: People don't know. It's a very stable  
25 salt. It was, in fact, used as a treatment for --

1 I'm sorry, I've blanked on the illness or the  
2 injury.

3 NOVELLY: Grave's disease.

4 BURIL: Grave's disease.

5 SMITH: Grave's disease. Sorry. So there are  
6 levels that are supposedly not detrimental to  
7 health. But again, this is one of those things,  
8 like MTBE, where it's a surprise. So we're trying  
9 to address it not just locally but regionally and  
10 throughout the state.

11 BURIL: I realize that this could have a  
12 profound impact on the OU-3 and OU-1 schedules,  
13 particularly given the fact that we have presumed  
14 that the only thing we were going to be dealing with  
15 were the volatile organics that we've dealt with  
16 thus far. We haven't really found anything to  
17 contradict that to date, including perchlorate,  
18 because we haven't had the analytical work done yet.  
19 When that analytical work comes in, we'll be sure  
20 and drop that information to you as rapidly as we  
21 can.

22 But again, the schedule that we have now  
23 is based on the idea that perchlorate would not be  
24 an issue. That may be a naive assumption at this  
25 point. I don't know.

1 SMITH: Well, you have to go with what you know.

2 BURIL: That's basically what we've done.

3 BISHOP: You have a couple of things that are  
4 hopeful. One is they've already tested Pasadena's  
5 wells and Lincoln Avenue's wells and the material,  
6 at least from what you've said earlier, is below the  
7 action level.

8 BURIL: Except in one of the wells, which leads  
9 me to be a little concerned. I'm not saying you're  
10 wrong, but I'm not saying -- it's not as rosy a  
11 picture as one might hope.

12 BISHOP: It would be important to find out which  
13 well and find out if --

14 BURIL: We're working to get that info right  
15 now.

16 BISHOP: Reproduce that data over time? Have  
17 they taken more than one sample?

18 BURIL: That I don't know.

19 CUTLER: The other issue, too, is we're  
20 operating a schedule now that we have all of our  
21 data for OU-3. The sampling round that's going on  
22 now is a long-term sampling event and this data  
23 won't get into the RI. But if perchlorate becomes a  
24 contaminant of interest on the site or a concern,  
25 then what do we do? Do we need to use this sampling

1 event and the next quarterly event as the OU-3 data  
2 for the RI, which pushes everything? So there are  
3 some of these types of issues that we might want to  
4 discuss.

5 SMITH: You may want to consider rolling that  
6 into the FS. It's not out of the question.

7 CUTLER: However we want to work it.

8 BURIL: Regardless, I think we're in a position  
9 of recognizing that if this contaminant does become  
10 one of concern and one which needs to be addressed  
11 in more than study the data and realize that it's  
12 not an issue for remediation, then we have a much  
13 different situation facing us than what we initially  
14 thought when we began talking about the interim ROD.

15 BISHOP: I think it will be much quicker because  
16 you can't treat it, so you just shut all the wells  
17 off.

18 BURIL: So you just shut all the wells off and  
19 get them an alternate water source.

20 BISHOP: There's no treatment that you can do.

21 BURIL: I can't argue with you. You're right.

22 So anyway, that is one of the issues, I  
23 think, that I wanted to be sure that you were aware  
24 of. This one is by far the most uncontrollable in  
25 terms of being able to understand what its impact is

1 going to be simply because we have no data thus far  
2 that we can really understand what we're dealing  
3 with at this point.

4       LOWE: Do you know if DHS is working with  
5 Raymond Basin or whether the other water purveyors  
6 are also looking for it?

7       BURIL: My understanding is it's statewide.

8       ROBLES: Raymond Basin gave us a call, asked us  
9 what we were doing about perchlorate. They don't  
10 have the money to send samples. So they were asking  
11 us to work with DHS because they don't have the  
12 money to send lab samples. They want us to use our  
13 wells. We said, well, we'll work with DHS. So  
14 we're only testing our wells right now.

15               I don't know about Valley Water or those.

16       BURIL: Upgradient I would hope that we wouldn't  
17 see a problem. But I think we've already identified  
18 a concern to the east of us with Lincoln Avenue and  
19 Pasadena. That's not an issue for action at this  
20 juncture, but depending upon what our monitoring  
21 wells tell us, we could have an entirely different  
22 situation.

23       ROBLES: It would be interesting if Valley Water  
24 has a high level.

25       BURIL: Wouldn't that be interesting.

1       BISHOP: Just on kind of a similar note, do you  
2 know if Lincoln Avenue or Pasadena have looked for  
3 MTBE?

4       BURIL: No, I don't. I don't know.

5       LOWE: But you guys will look for it on the  
6 facility.

7       BURIL: We haven't found it. In fact, one of  
8 the things we wanted to mention to you today is a  
9 proposal that we eliminate that as a contaminant for  
10 analytical consideration because we just simply  
11 haven't found it in a number of sampling rounds.  
12 Hopefully that will give us an indication that it's  
13 not a regional concern because it's not showing up  
14 in our water here.

15               A couple other things that I'd like to  
16 bring to your attention as well with relation to the  
17 schedule. Mark brought up one of them, and that is  
18 what set of data should we be utilizing in trying to  
19 establish the interim ROD. I don't know that we  
20 have an easy answer to this, given the fact that  
21 we've got analytical work that's ongoing that may  
22 have an impact on this. But in concept, I'd look to  
23 you folks to hear what your thoughts are regarding  
24 the need to incorporate perchlorate into the RI at  
25 this point as opposed to relying on sets of data

1 that we've already obtained which did not analyze  
2 for perchlorate.

3 BISHOP: I think, from my point of view, the  
4 question is at what point do you need to stop to  
5 meet your schedule. At what point can you not  
6 incorporate a new round of data.

7 BURIL: Right now.

8 BISHOP: Right now, to meet your schedule.

9 BURIL: That's correct.

10 BISHOP: I think that's pretty much unrealistic  
11 until you get the information back on the  
12 perchlorate because, at least from my point of view,  
13 if you've got a serious problem with perchlorate on  
14 the site, you're going to have to have that in your  
15 RI.

16 BURIL: Okay. I agree with you. But I wanted  
17 to get your opinions regarding that. I would agree  
18 with you, Jon, that if we do find there is a  
19 significant perchlorate concern here that it should  
20 be incorporated in the OU-3 RI. Recognize that the  
21 schedule that we developed was based on the idea  
22 that we didn't have any concerns other than what  
23 we've identified thus far.

24 BISHOP: Now, my suggestion to go along with  
25 that is that you continue working, because if you

1 come back in two weeks, or whatever it is, 28 days,  
2 whatever, and you've got all nondetects --

3 BURIL: Then it's a different issue.

4 BISHOP: -- then are you going to be waiting for  
5 the next month and a half not doing anything,  
6 because you don't know which way to go on your RI  
7 writing.

8 I mean, I guess what I would say is move  
9 as far forward on the audit as possible so that you  
10 either go one way or the other once that data is in,  
11 but you've got everything else done.

12 BURIL: Okay. I can understand that. In fact,  
13 I guess what we're talking about, then, let me just  
14 try to quantify it.

15 Mark, if I miss something, jump in.

16 What we would be talking about, then, is  
17 all the preliminary stuff, basically all the  
18 introductory, how we did this, why we did it, all  
19 the logic behind what was done, right up to the  
20 evaluation of the analytical data that says this is  
21 what our situation is and how we intend to move  
22 forward.

23 BISHOP: I think you should include the analysis  
24 of the VOC analytical data because you have that  
25 information and you could start talking about what

1 your -- where your contaminants are, where they've  
2 moved, whatever information you're --

3 BURIL: Let me be sure that this is going to be  
4 something that you folks would accept. Then if we  
5 have analytical information from, say, two events  
6 ago for Operable Unit 3 and we would use those as  
7 being the most recent two events and say, okay, for  
8 VOCs we would use that information, develop our  
9 rationale and evaluation based on those two sets.  
10 Then when the next set comes in, which includes both  
11 VOC and perchlorate data, we would then focus on the  
12 perchlorate only and move into that, or would we be  
13 in a position of having to incorporate the other  
14 data as well?

15 BISHOP: I guess I'd want it both ways. So you  
16 would use that unless there was a change. We've had  
17 fairly steady situations out in OU-3 for VOCs, as I  
18 remember. I mean, there has been some change, but  
19 there hasn't been a lot of change over time.

20 BURIL: Then I would have to caveat the schedule  
21 to a limited degree to say that that's feasible  
22 unless we see that change that you're talking about  
23 during the development of the RI, in which case our  
24 schedule is going to change because we would not be  
25 anticipating that and we would have to incorporate

1 that.

2 BISHOP: But I think -- at least I would feel  
3 pretty silly to come out with an RI that totally is  
4 in contradiction to your most recent data for VOC.

5 BURIL: That's the reason I'm bringing this up,  
6 is to try and understand.

7 BISHOP: Then you would have to deal with that  
8 in your comment period where you know this is not  
9 reflective of reality because you've had other  
10 samples but they were beyond your cut-off date for  
11 your report.

12 BURIL: If I can summarize what your thoughts  
13 are, and then maybe Debbie or Richard have some as  
14 well.

15 What you're saying is, go ahead, complete  
16 it as though you didn't have a concern with  
17 perchlorate just on the basis of the data that we  
18 have, but when we do have the perchlorate  
19 information, we should incorporate that as well, and  
20 if we have data from the Operable Unit 3 volatiles  
21 that show little or no change from what they were in  
22 the initial analysis, that we need not incorporate  
23 those, but if they are radically different, then we  
24 should incorporate those.

25 BISHOP: Right.

1 BURIL: Okay.

2 BISHOP: Does that make --

3 LOWE: Yes. I mean, I think that's what we as  
4 project managers can accept. But the one caveat I  
5 would put on there is the risk assessment. There  
6 may be a need to look at the human health risks on  
7 one set of data rather than varied.

8 CUTLER: We can get started on some of that if  
9 we can use the existing data set. See, right now  
10 for OU-3, just to refresh your memories, after the  
11 wells were put in, they were sampled twice, the  
12 original RI rounds, we did all the VOCs, all the  
13 semivolatiles, full suite of metals. Since then  
14 we've gotten in three quarterly sampling events  
15 where all we've done are the VOCs and like three  
16 metals.

17 10 percent of the first two events, where  
18 we did all the semivolatiles and everything, 10  
19 percent of that data is validated. So for OU-3 the  
20 original thought was to do the first two data sets  
21 and then maybe just confirm that with the following  
22 three long-term quarterly events.

23 That's another question, is do we need  
24 validated data for the RI because then that would be  
25 another factor in the schedule. If we did the

1 perchlorate and maybe some new VOC information, we  
2 need to build in a validation period and then use  
3 that data for risk assessment. So I don't know  
4 what -- some of these discussions we haven't had on  
5 what you guys would like to see. So the current  
6 schedule is based on using existing 10 percent  
7 validated data for the risk assessment where we can  
8 get started now and the RI where we can get started  
9 now.

10 Does that make sense?

11 But if you wanted the last three quarterly  
12 events, or pick two of those events for the RI, that  
13 data has not been validated. If you want validated  
14 data, we would have to build that into the schedule.

15 BISHOP: I don't know what EPA's feeling on it  
16 is, but my feeling is that you validated that 10  
17 percent. If you're not having a difference between  
18 that, then the quarterly data is in the same range  
19 as the validated data. I'm not so concerned about  
20 getting validated data for it. I am concerned about  
21 only looking at data that was two years ago in the  
22 RI event and not incorporating any quarterly  
23 sampling at all.

24 CUTLER: Right.

25 BISHOP: Doesn't necessarily mean we need to go

1 back and validate the recent quarterly sampling, but  
2 you've taken that sample, you've already got that  
3 data. I think you need to incorporate it into the  
4 RI.

5 BURIL: But that makes the assumption, then,  
6 that we haven't seen enough of a shift in the data  
7 itself to generate a concern that we either may have  
8 a different scenario or a data quality question  
9 being imposed on us.

10 BISHOP: That's right.

11 BURIL: I can't argue with you. That makes  
12 sense.

13 CUTLER: We agree. Validation was a check on  
14 the lab's abilities and we feel confident in our  
15 quarterly results.

16 BURIL: I think that's fine. I don't have a  
17 problem with that.

18 Does that make sense to you, Mark? Can  
19 you proceed on the basis of that?

20 CUTLER: That's basically the way our schedule  
21 is set up. But that would be an acceptable  
22 scenario.

23 LOWE: So the quarterly monitoring doesn't show  
24 up in the RI at all?

25 CUTLER: No. We haven't started the RI. What

1 Chuck was saying, if we wanted to pick like the last  
2 two recent RI events and maybe take that data and  
3 throw it into a risk assessment, this is kind of our  
4 thoughts, we want to use the most recent data, but  
5 the most recent data is not validated. We don't  
6 know how big a concern that is. But it's very  
7 similar to data that has been validated. We feel  
8 very confident that it's representative.

9       LOWE: I understand, you know, taking a certain  
10 set of data to feed into the risk assessment. But  
11 when you're thinking about hydrogeologically what's  
12 going on out there, aren't you going to be looking  
13 at all the data and saying, okay, this is what we've  
14 got here, over the year we have seen these kinds of  
15 trends. And the same thing with the water level  
16 data. Aren't you going to be looking at all of the  
17 data in your RI?

18       CUTLER: Right. As this goes on, it's becoming  
19 a bigger and bigger time period and it is so dynamic  
20 out there that it's getting into doctorate thesis  
21 proportions because of all the groundwater data we  
22 do have.

23               But I think I spoke earlier about we want  
24 to use the first two events because that's where the  
25 semivolatiles are and all the metals are. We don't

1 have any other data sets for semivolatiles or a full  
2 suite of metals. So we'll have to use that early  
3 data for those.

4 LOWE: Okay.

5 BURIL: But again, we've made the determination  
6 that subsequent evaluation of those parameters  
7 wasn't necessary.

8 CUTLER: Right.

9 BURIL: That's not a problem.

10 LOWE: But you will be looking at all of the  
11 volatile data --

12 CUTLER: Right. Yes.

13 LOWE: -- for like a year, year and a half,  
14 however much time you have?

15 BURIL: Yes.

16 CUTLER: The plan was these five events up to  
17 right now. The first two we did everything. The  
18 last three quarterly events, all that data will go  
19 in the RI. We want to pick -- one of the questions  
20 Chuck has is which event or two events do we pick  
21 that data from to do the risk assessment.

22 BURIL: And are you comfortable in leaving that  
23 data as being validated by association with the  
24 previous data as opposed to having it validated  
25 specifically. Because we're talking about having it

1 validated by association. It's the same lab, same  
2 numbers and so forth. And so we have confidence  
3 that it's adequately QA/QC'd and usable for a risk  
4 assessment.

5           If, indeed, we're more concerned about,  
6 for example, public input to this that says that you  
7 didn't validate this data, we know that it was  
8 adequate for use in a risk assessment, that's a  
9 little different scenario. Public impact of this  
10 particular project is becoming more and more in the  
11 forefront. I don't know -- if you're comfortable  
12 with that -- I'm comfortable with it personally and  
13 professionally. If you're comfortable with it as  
14 well, I have no problem.

15       BISHOP: I would make a suggestion that, once  
16 again, the risk assessors get together and decide on  
17 that. I don't think it's really our place to make a  
18 decision for them on are they comfortable with the  
19 validated or unvalidated data. If they need the  
20 validated data, then they use those two rounds,  
21 would be my suggestion. If they don't, then it's  
22 probably best to pick the most recent data, most  
23 representative data.

24       BURIL: I agree.

25       ROBLES: So you want the risk assessors in your

1 agencies to make that choice.

2 BISHOP: With the risk assessors from Foster  
3 Wheeler.

4 BURIL: From Foster Wheeler and from DTSC and  
5 EPA.

6 GEBERT: Right. They're involved.

7 ROBLES: So, therefore, when the public comes in  
8 and asks, we're all on the same wavelength.

9 LOWE: Yes.

10 BURIL: And we get --

11 LOWE: Dan.

12 BURIL: -- Dan. Thanks. Stralka.

13 If I could ask you two to contact me and  
14 we'll try to help you set that up, and we'll work  
15 with Foster Wheeler to get that set up as well.  
16 We'd need to get some dates from you folks as to  
17 when your risk assessors are available to discuss  
18 this.

19 GEBERT: Are you thinking of a face-to-face  
20 meeting, or a telecon?

21 LOWE: Are we going to make this decision before  
22 or after we see the first round of perchlorate data?

23 BURIL: Well, there's two questions to this that  
24 I have. That's number one. Do we make this  
25 decision after we actually see the perchlorate data

1 and give them opportunity to have a full set of  
2 understanding, if you will, regarding all the  
3 constituents that may be of concern?

4 And the second question, do we establish  
5 that we stick to this schedule that we have out here  
6 before that same event takes place, that we have  
7 perchlorate analyses available to us and the risk  
8 assessors have opportunity to review it and give us  
9 their opinion?

10 So two related issues, but both of them  
11 kind of immediate.

12 LOWE: As far as the schedule goes, I think  
13 we've had a lot of versions that have been floating  
14 around and it's hard to know which is the most  
15 current one.

16 BURIL: You're holding it.

17 LOWE: I would rather that we sign something  
18 like this today after the agencies have a chance to  
19 talk about the schedule, and recognizing that this  
20 schedule was set not considering perchlorate.

21 BURIL: Okay.

22 LOWE: And then to the extent that you need an  
23 extension to incorporate the perchlorate data, that  
24 needs to come as an official request under the FFA  
25 saying "We're requesting extra time for this OU,

1 this OU and this OU because of perchlorate."

2 BURIL: Okay. Do you feel comfortable with  
3 that?

4 LOWE: I just think we need to make a cleaner  
5 record.

6 BURIL: That's fine. I would prefer that, quite  
7 frankly. I think that's fine. I don't have a  
8 problem.

9 GEBERT: No, I don't either. I think it's best  
10 to go under the assumption that perchlorate will not  
11 impact.

12 BURIL: That's all we know about it.

13 GEBERT: Right. If it does, then we'll deal  
14 with it then. Let's continue as we are.

15 BURIL: That's fine. My contractors thank you.

16 Now, as far as the first question  
17 regarding the risk assessors and which set of data  
18 to use, I think really we're in a position now of  
19 just needing to get the risk assessment people  
20 together as soon as possible.

21 A telecon for me is fine. I don't have an  
22 issue with that at all. If Richard and Debbie --  
23 Debbie, you're not going to be here after today.  
24 Bobbye, I guess I would have to rely on you to  
25 inform Dan of the issue.

1 SMITH: I'll talk to Dan.

2 BURIL: And get him involved again in terms of  
3 trying to resolve this.

4 LOWE: When do you expect to have the  
5 perchlorate data, even if it's unvalidated?

6 BURIL: We'll have all the samples by when,  
7 Mark?

8 CUTLER: Probably take another three weeks just  
9 to finish sampling. It's a very quick analysis.  
10 They can do them in a matter of minutes, apparently.  
11 I can't imagine it being very long after that.  
12 Couple weeks after that we should have the data.

13 LOWE: Then do you think you're going to wait  
14 until you have all the samples before you start  
15 running any of them?

16 BURIL: Oh, no. I don't think so.

17 CUTLER: Shouldn't, no. We should get data  
18 earlier than that.

19 BURIL: But we'll be getting it piecemeal as  
20 opposed to having a body of all the data. So we'll  
21 get it as we've sampled the wells.

22 CUTLER: They may not start analyzing for  
23 probably two more weeks because of this approval  
24 with DHS. So right now we're archiving the samples.

25 BURIL: Okay. So we'll go ahead. After you

1 folks have had a chance to talk amongst yourselves  
2 regarding the schedule, we can hopefully make that  
3 official. And then whatever changes are necessary  
4 as a result of new information, we'll make them at  
5 that time.

6       LOWE: If we wanted to try and set something up  
7 for next week or the following week --

8       BURIL: The following week I'm not here. I'm  
9 not critical to that conversation, but I'd like to  
10 be present if it's possible.

11       LOWE: -- to talk about the question of the  
12 validated data and which data set to use, I could  
13 participate in it, which is probably better --

14       BURIL: We would appreciate that very much.

15       LOWE: -- for Bobbye.

16       BURIL: I think the continuity there would be  
17 critical because we are at kind of a critical stage,  
18 I think.

19       ROBLES: We're going to be up at EPA in San  
20 Francisco next week. We'll be at the Federal  
21 Facility Conference.

22       LOWE: We would have to tie in Foster Wheeler.  
23 Right?

24       BURIL: I think that can be arranged.

25       CUTLER: We have our Sacramento office and our

1 office.

2 BURIL: If you have a conference room with a  
3 conference phone, I'll pull strings and make these  
4 guys available.

5 LOWE: I don't know that the hotel where we're  
6 having this, if they're going to have conference  
7 call capabilities from there.

8 BURIL: Maybe over at headquarters?

9 LOWE: You're definitely welcome to walk over to  
10 my office to do it. I just don't know.

11 BURIL: I would suggest that we go to  
12 headquarters just so we know we have the facilities.

13 LOWE: "Headquarters." What's "headquarters"?

14 BURIL: EPA headquarters.

15 LOWE: Region 9?

16 BURIL: That's what I call it.

17 SMITH: We'd like to think it is. D.C. has a  
18 little bit of objection to that one.

19 It's a bit of a walk. It's about a  
20 15-minute -- more than that. This is quite a walk,  
21 but you can hop the train.

22 BURIL: We could hop the trolley or get a cab.

23 ROBLES: We can call and see if there is a  
24 conference capability at the hotel. That would be  
25 the easiest way to do that.

1 BURIL: This is at the Holiday Inn on Van Ness,  
2 isn't it?

3 SMITH: Yes.

4 ROLES: That would be the best, is the ability  
5 to do it from there.

6 NIOU: Van Ness is some distance from --

7 BURIL: That is a fair distance. That's true.

8 LOWE: You guys are both in your office on  
9 Monday?

10 BURIL: Yes.

11 ROBLES: Monday morning at 11:00 o'clock I will  
12 be taking a plane to go to San Francisco.

13 BURIL: I won't be flying in until 7:00 A.M. to  
14 San Francisco.

15 ROBLES: So if it's before 11:00 I can make it.

16 LOWE: Could you start Kathy off this afternoon  
17 calling Barbara? What is it, Barbara Renzi?

18 GEBERT: Barbara Renzi in Sacramento.

19 ROBLES: We can do it at 9:00 in the morning on  
20 Monday.

21 LOWE: On what day?

22 ROBLES: Monday.

23 LOWE: On Monday?

24 ROBLES: Monday.

25 LOWE: I thought you wanted to do it in San

1 Francisco.

2 ROBLES: Oh. You wanted to do it in San  
3 Francisco. That would be Tuesday.

4 LOWE: Can I just suggest that Kathy call this  
5 afternoon both Barbara and Dan Stralka to check on  
6 their schedules.

7 BURIL: Can you make a note of that, Judy?

8 NOVELLY: Yes.

9 BURIL: Thanks.

10 LOWE: And then Kathy would also need to check  
11 in with all of us. Because I don't know if there  
12 are certain times on this conference that you  
13 absolutely, positively don't want to miss.

14 BURIL: To be honest with you, I haven't looked  
15 at the schedule to make that determination. I know  
16 what's there, but I haven't really decided which one  
17 I don't want to miss yet.

18 LOWE: I have a conflict Wednesday from 9:00 to  
19 11:00, but I think that's my only meeting set up  
20 right now.

21 BURIL: Do we know that either Dan or Barbara  
22 would be available on those days? Do you have any  
23 idea?

24 GEBERT: I don't know.

25 BURIL: Let's see if we could pull a schedule

1 together for either Tuesday or Wednesday. We can be  
2 available there at EPA Region 9 office and  
3 conference in Barbara and Richard and Foster Wheeler  
4 folks from wherever.

5 LOWE: Jon, do you feel the need to be on this?

6 BISHOP: No.

7 LOWE: Richard, do you have any major conflicts  
8 next week?

9 GEBERT: No. Next week I'm pretty open.  
10 Monday, no.

11 LOWE: So Monday is definitely out.

12 GEBERT: Monday is out, yes.

13 SMITH: I'm not going to be available -- I'm on  
14 call Wednesday for that. I'm leading a panel as  
15 well there.

16 BURIL: Let's get some of the information as far  
17 as schedule goes. We'll try to shoot for Tuesday or  
18 Wednesday and get everybody together and see what we  
19 can do.

20 LOWE: Okay. Will you both be checking your  
21 voice mail while you're at the conference so we can  
22 try to coordinate that way?

23 BURIL: Sure.

24 ROBLES: Yes.

25 BURIL: All right. Now, given the fact we can't

1 resolve that until after we get Barbara's and Dan's  
2 schedule, there's one other question that I have  
3 regarding how we approach the RI. This may be a  
4 premature question given the fact that we don't have  
5 all the data that we might need.

6           One of the things that struck me when we  
7 were talking about the remediation and the  
8 feasibility study that is associated with that,  
9 there's two philosophies that kind of jump out at  
10 me. This is something that was brought up by Foster  
11 Wheeler as well. They deal with the existing  
12 treatment plants that we currently have in Operable  
13 Unit 3.

14           If we focus ourselves on the idea of  
15 cleanup of water, basically wellhead treatment for  
16 the ability to provide good water to the water  
17 company customers, that could lend one answer to the  
18 overall FS process. If we focus on remediation and  
19 containment of the aquifer, that could pose a fairly  
20 significant difference in the way that we approach  
21 dealing with the remediation issue.

22           Given this new issue of perchlorate, do  
23 you have any suggestions on how we might proceed now  
24 in dealing with that philosophy difference?

25           BISHOP: Actually, I do, because it's something

1 that we deal with a lot, which is you have -- you're  
2 trying to address the contamination, but it's  
3 already led to a production well that's now got  
4 treatment on it. So in essence you've got partial  
5 containment by that well.

6 Now, what we've asked people to do is look  
7 at -- make sure that the FS looks at containment of,  
8 are those wells contained in the contamination, are  
9 they just going by at certain levels? Do you need  
10 to augment the extraction and treatment that's going  
11 on already?

12 And that, I think, makes the most sense  
13 approach as being one, you look, you say what we  
14 need to do in this is to contain this contamination.  
15 Then, okay, we've got this existing system, but  
16 because the wells are drilled deep, we have a  
17 certain amount of shallow contamination that's going  
18 by, or because this area is not screened by any  
19 production wells, we know we've got contamination  
20 moving through past them.

21 CUTLER: So we're looking at the production  
22 wells with wellhead treatment. Are they remediating  
23 the effluent?

24 BISHOP: Are they containing. Because they're  
25 not designed to remediate.

1 CUTLER: Right.

2 BISHOP: Now, the next question is, once you  
3 look at that, you have another question to answer,  
4 which is if you put in a few specific extraction  
5 wells, can you take care of the containment with  
6 much smaller volume, much cheaper cost, as opposed  
7 to the production well.

8 LOWE: I thought this is what we had talked  
9 about in our whole last partnering meeting about  
10 defining the objectives for OU-3 and really looking  
11 at OU-3, answering the question of have we  
12 identified all of the wells off the facility that  
13 are threatened, which ones are at risk and what  
14 would be the actions that we take.

15 BURIL: In fact, you're right, Debbie. We did  
16 discuss this, but Foster Wheeler didn't have  
17 opportunity to be party to the conversation. And I  
18 wanted to raise it just one more time to be sure  
19 they heard it directly from you folks. I have no  
20 problem with what you're telling us. That's exactly  
21 the direction that we talked about in the partnering  
22 meeting.

23 LOWE: OU-3 is a limited scope. We're not even  
24 asking a question of how would we remediate this.  
25 The question is kind of postponed to be part of

1 OU-1, which is now more of an overall groundwater  
2 ROD rather than just an on-site groundwater ROD.

3           So first you answer the question of have  
4 you eliminated all public health risks, which ones  
5 are threatened, are these existing treatments going  
6 to last, do they need to be upgraded. The  
7 perchlorate fits right into that.

8           Then when you go back and you look at your  
9 on-site -- your new deep wells, then you look at,  
10 okay, is this migrating further off base, is there  
11 now the need to do some sort of bigger extraction  
12 system on the other side of the Arroyo? It's a  
13 bigger question.

14         BURIL: Jon, one of the things, too, correct me  
15 if I'm wrong, anybody, but in our last partnering  
16 meeting we also talked about the idea that if,  
17 indeed, we had contamination that went beyond the  
18 zone of capture that was created, because they're  
19 intermittent, if it did get beyond, if we are able  
20 to show the concentration of that particular  
21 contaminant would no longer be at a level of concern  
22 at the next well downstream, that we would be able  
23 to say we had adequate containment based on that as  
24 well. Is that what you recall?

25         BISHOP: I think that's fine for an interim ROD,

1 but you're just looking to address the -- you're not  
2 going to bring another well down, essentially, that  
3 you've got containment of the contamination that  
4 you've addressed --

5 BURIL: And then we have a monitoring network  
6 that allows us to watch that.

7 BISHOP: To know that it's working.

8 BURIL: Right. Okay. Good.

9 CUTLER: On the same lines, it kind of feeds  
10 into what was on your list, too, what about the  
11 ARARs? How do we evaluate the effectiveness of  
12 these systems? What levels? Did you want to get  
13 into that now?

14 BURIL: I guess we could. Mark, why don't you  
15 articulate your question.

16 CUTLER: I guess the question is how do ARARs  
17 impact us. Are we going to go by MCLs? You were  
18 talking about PRGs. Or are we going to use risk  
19 levels to make sure we're addressing these concerns?  
20 I mean, what would be the driving --

21 BISHOP: I think this goes right back to the  
22 objectives that you put in the FS. If your  
23 objectives of the interim ROD is to contain  
24 contamination, then you want to pick a set -- you  
25 want to pick your measurement as part of -- that

1 you're not increasing contamination at certain  
2 points. If your goal is to -- since our goal is to  
3 contain, I think that's the approach. I'm trying to  
4 think of one of the other --

5 CUTLER: Does it matter which levels we contain?  
6 Do we have to contain everything above an MCL?

7 BURIL: That goes back to the question that I  
8 just brought up, about if you know that something  
9 goes by, but yet it's at a level that's below a  
10 concern because by the time it gets to your next  
11 point that you're watching that it's no longer a  
12 level of concern, you need to kind of identify what  
13 those levels of concerns might be.

14 BISHOP: Right. You need to look at what  
15 level -- that's a little bit different than what you  
16 said before.

17 BURIL: A little. But it's similar.

18 BISHOP: But it's different. Because if it's  
19 already beyond your zone of capture, do you need to  
20 go out and put in a new well to capture that, or are  
21 you going to let things go by? Those are two  
22 different things.

23 Because one is saying we know that this  
24 system that we're putting up is going to allow  
25 contamination at 50 parts per billion for the next

1 mile and a half, but by the time it reaches the next  
2 production well it's going to be below MCL. That,  
3 then, is saying what we're using is we're using this  
4 mile and a half, or whatever it is, as part of our  
5 treatment process.

6 KLIMBERG: Natural attenuation.

7 BISHOP: Right. Or we're using it for dilution.  
8 That is a different question than we know that we  
9 have some contamination that's moved beyond this  
10 point, but to go out and actually capture that and  
11 keep it from going any farther is going to cost this  
12 kind of money, it's going to cost this kind of work.  
13 It's a different story.

14 CUTLER: Right. We're just trying to figure out  
15 which story we should all be writing, I guess.

16 BISHOP: Right. I'd be very uncomfortable with  
17 the idea of just picking existing production wells  
18 downgradient as being this is our goal, to make sure  
19 that this production well, whatever it is, how far  
20 away it is, is below MCL, is the only thing we're  
21 concerned about.

22 BURIL: Could you give us some examples, Jon, of  
23 the other things you would like to see thought of in  
24 that regard?

25 LOWE: I think what needs to happen is that we

1 need to start pulling together this OU-3 data in  
2 more of an RI format and letting us actually see it  
3 and chew on it before you start coming up with what  
4 your remedial actions are going to be. We're kind  
5 of like jumping the gun here. Does that make sense?

6 BURIL: I would agree, except we already have  
7 remedial actions in place. Those were presumed to  
8 be the rationale that allows us to move to an  
9 interim ROD, as I understood it. I understand where  
10 you're coming from, but I think we've already kind  
11 of made some tacit decisions here about what's going  
12 to happen. That's why I want to try and understand  
13 some of the other things.

14 LOWE: We're trying to evaluate whether or not  
15 those are adequate enough, whether more measures are  
16 needed --

17 BURIL: Right. And that's not a problem.

18 LOWE: -- whether more monitoring wells are  
19 needed. Until the information is presented to us in  
20 that kind of manner, it's hard to keep having these  
21 theoretical discussions.

22 BURIL: Well, the theoretical discussion really  
23 focuses on what the objective of the remediation is  
24 going to be. Jon put it fairly succinctly. Is it  
25 going to be that no further production wells are

1 impacted by a plume of X concentration, or is it  
2 going to be some other objective? He said just now  
3 that he would be uncomfortable in looking at that as  
4 just a sole objective.

5 I was hoping you might give us some  
6 examples of the other objectives that you would  
7 anticipate having incorporated.

8 BISHOP: Right. I would like to see some  
9 objective that you're containing contamination at  
10 the existing treatment plants or on site, you know,  
11 on that area. Am I making sense out of that? Let  
12 me put it another way.

13 That you are not going to allow  
14 significant contamination to pass by the treatment  
15 plants, from on site pass by the treatment plant.

16 BURIL: I guess we maybe should go back to what  
17 might have generated the original question. That  
18 was what level do we consider, quote, significant  
19 and how is that determined.

20 ROBLES: I get a sense that we don't want to put  
21 a number to this. I get a sense that I've got a  
22 real problem with this, guys and two ladies. We  
23 don't want to talk about a number. What are we  
24 doing all this work for? We've got to come to a  
25 consensus of what number we're going to deal with.

1 What is significant? It's a number. It seems we've  
2 been going around this since I've been here on  
3 meetings. What number are we going to clean up to?

4 Yes, we have a goal, but nobody wants to  
5 talk about a number that that goal is.

6 BISHOP: This is the first time we've talked  
7 about it, Peter, so I don't think this is an issue  
8 to say that we've been dancing around the issue for  
9 ages.

10 ROBLES: I remember a while back we asked are we  
11 going to go MCL level, action levels, or so on. I  
12 understand that we should say we're going to  
13 contain. What level are we talking about? We're  
14 now starting to develop a feasibility and we're  
15 looking at the data. Are we saying we want to look  
16 at the data, then set a standard? Or do we want to  
17 set the standard first? Or is there a standard at  
18 all?

19 I have a concern.

20 BISHOP: Yes, there is a standard, but it's not  
21 always attainable. The standard is MCL. But you  
22 have to then take that and say does this make sense.  
23 Sometimes it does and sometimes it doesn't.

24 If you want a number, I'm going to say  
25 that's what we want to try and contain, is MCL. But

1 does that make sense? Can we physically do it?

2 BURIL: That's the determination of the  
3 feasibility study to make.

4 BISHOP: Right.

5 ROBLES: Right.

6 BURIL: But if that's our conceptual goal, if  
7 you will, then that's something that we'd like to be  
8 able to use because that is something -- a  
9 feasibility study needs to work toward that.

10 ROBLES: Now, I feel comfortable in that just as  
11 you stated it. If it's MCL, we look at it. If we  
12 can attain it, great. If we can't, then we justify  
13 why we can't. We agree to it, and as new technology  
14 comes in, we modify what we have to do.

15 BISHOP: I jumped out there, but I think that's  
16 what we always look at as --

17 ROBLES: I'm just saying, if it's the MCL level,  
18 if the action level is nondetect. We got to come up  
19 with something because ultimately the public is  
20 going to say "What is the number?"

21 LOWE: I think there are different numbers that  
22 you use for different purposes. For what Jon stated  
23 as trying to contain to the MCLs, I think that makes  
24 sense. But if you're talking about like having a  
25 guard well in front of a water supply well, then you

1 may want to look at lower levels saying, okay, maybe  
2 when we reach half MCLs and we know it's going up,  
3 then we're going to start designing our treatment  
4 systems so that we could have it there when it does  
5 hit MCLs.

6 SMITH: Or we design our treatment system ahead  
7 of time in anticipation of that so that when it  
8 comes to that you don't have six months before the  
9 wellhead has protection.

10 BURIL: So what you're talking about, more or  
11 less, then, is a risk management issue as opposed to  
12 a cleanup goal issue. They're related.

13 LOWE: Right.

14 BURIL: But the one is anticipation of risk,  
15 where this one is dealing with actual physical  
16 contamination that needs to be dealt with.

17 BISHOP: We're not talking about cleanup because  
18 that's the -- I mean that becomes a whole different  
19 issue.

20 ROBLES: Exactly.

21 BISHOP: I don't think you can technically clean  
22 it up to, but you may be able to contain it to that  
23 level.

24 ROBLES: Ladies and gentlemen, we're not in the  
25 business of cleaning up. We can't. There is no

1 way. I've learned this recently through studies.  
2 We're in the containment business. To clean every  
3 last molecule that's out there that we have caused,  
4 it's going to be impossible.

5 But what we can do is deal with getting it  
6 to a level that is accepted that meets the risk  
7 issues. The key question, why I'm so particular  
8 about getting to a number is because when we get  
9 into the health risk side, as you so eloquently put  
10 it, we got a tie. Okay. We don't want half of the  
11 MCL level or half of an action level or half of  
12 non -- whatever. That gives us a place where we can  
13 start talking about. But, see, that's what I've  
14 been worried about. We haven't been talking numbers  
15 and we've got to start talking about that.

16 BURIL: Then if we say that, just to try and  
17 wrap this discussion up as succinctly as I think I  
18 understand it, is that if we assume that one of our  
19 goals of the feasibility study is to determine if we  
20 have the ability to capture and contain  
21 contamination at the level of MCL in Operable Unit 3  
22 with the existing treatment systems or other  
23 augmentation that might be required, that should be  
24 at least one of the objectives that we identify.

25 BISHOP: Right. You've kind of mixed in your

1 statement there between an objective, which would  
2 be, simply stated, to contain an MCL. And then you  
3 look at you've got existing treatment. Does that do  
4 that?

5           It's not does the existing treatment  
6 contain an MCL. The statement is you're looking to  
7 contain an MCL. And then you're looking at your --  
8 you've got existing treatment there that was put  
9 there for another purpose. Is that accomplishing  
10 that goal?

11       BURIL: I'll concede I maybe stepped ahead. But  
12 for practical purposes, what I stated is ultimately  
13 what is going to be presented.

14       ROBLES: That's a good point.

15       BURIL: I agree.

16       ROBLES: Do we contain to MCL level. Then the  
17 other thing, the second question with that, correct  
18 me if I'm wrong, is contain to a level that is  
19 health risk acceptable, whatever that number is.  
20 That could be MCL. That could be less than MCL.  
21 That could be more than MCL. So therefore,  
22 that's -- I like those two, because then we could go  
23 to the most stringent one and then we know we're  
24 covered.

25           That's where I'm very much concerned

1 because the health risk issue is the one that really  
2 bothers me more than anything else; the number that  
3 we come out with the health risk issue. In most  
4 cases health risk is worst case really faulty. It  
5 assumes somebody is going to drink water for 100  
6 years or whatever.

7 SMITH: 70 years.

8 ROBLES: 70 years. Fully contaminated, pure,  
9 you know, whatever, for 70 years and develop. I  
10 just got an executive order on my desk that talks  
11 about that we need to look at the impacts to  
12 children.

13 SMITH: Correct.

14 ROBLES: So that is a new thing that has come  
15 over. Do I have to throw that in the mix? Are  
16 children more important than adults, and what they  
17 drink and is that going to drive it even lower? So  
18 it may not be attainable for that. I don't know.  
19 MCLs may be too high. We've got to start talking  
20 numbers because we've got to know how much is this  
21 remediation going to cost, and is it possible, is  
22 the technology there?

23 BURIL: I think what we're really trying to  
24 understand is whether we're in a position of having  
25 to boil the ocean or not. That's one of the old

1 phrases that I remember so well is that you can't  
2 solve pollution by trying to boil the ocean. It  
3 just doesn't happen. It's not going to work. By  
4 trying to clean up the entire aquifer, I would view  
5 that as saying you're trying to boil the ocean.

6 BISHOP: I mean, this is not -- it's not unique  
7 here at JPL to have volatile organic compounds  
8 contaminating supply wells.

9 I don't think we're in a position where  
10 once you do the risk assessment it's going to show  
11 you can't have any contamination anywhere in Raymond  
12 Basin to meet the risk assessment. I don't think  
13 that's likely or feasible.

14 BURIL: That's the point.

15 CUTLER: Would you have a sample FS, like for  
16 San Gabriel Valley, same type of thing that would be  
17 available?

18 BISHOP: Sure. The Puente Valley FS just came  
19 out, which is actually fairly similar. It talks  
20 about there's existing treatment, and the  
21 feasibility says that you will contain contamination  
22 both in the deep and the shallow zone and it says it  
23 doesn't assume that that treatment will be used, the  
24 existing treatment will be used. But it doesn't  
25 preclude it either. So for the pricing in the FS it

1 puts in new extraction to contain it but doesn't  
2 preclude going in and using the existing well.

3 BURIL: That sounds very similar to what we're  
4 talking about.

5 LOWE: That's also an interim ROD. Right?

6 BISHOP: Yes. They're all interim RODs.

7 CUTLER: Is that something we can get a copy of?

8 BISHOP: There's two ways you can get a copy.  
9 One is you can talk to EPA, since they produced it.  
10 Two, you can come by my office and copy it. I only  
11 have one copy.

12 LOWE: I'll look into it.

13 CUTLER: Oh, you'll volunteer? Thanks, Debbie.

14 BISHOP: It just came out last week, so it's  
15 brand new.

16 CUTLER: It's brand new, state of the art.

17 BURIL: The next question that we have,  
18 actually, it's a request for some assistance. Part  
19 of what we'd like to be able to do in looking at the  
20 remediation systems that are currently in place to  
21 make the determination if they are adequate, is to  
22 look at some of the work that's been done by Lincoln  
23 Avenue Water Company.

24 We have requested data from them regarding  
25 concentrations of constituents coming from their

1 wells and how it goes through their treatment plant.  
2 They have thus far been unresponsive to those  
3 requests. And if there is a mechanism that the  
4 regulatory agencies can utilize to assist us in  
5 obtaining that data, I would be very grateful.

6 BISHOP: If you just give me what you want. Do  
7 you want influent and effluent?

8 BURIL: Influent, effluent. They have some mid  
9 points within the plant. And that should do it.  
10 That's really all I need. Then the individual  
11 concentrations from their wells.

12 CUTLER: I think they sample each well.

13 LOWE: How far back?

14 BURIL: If we could get it from when they put  
15 the thing in operation back in '91, that would be  
16 ideal.

17 CUTLER: I know you wanted this data on the  
18 quarterly monitoring reports. Apparently it's that  
19 easy to get.

20 BURIL: It's been requested, and thus far  
21 they've declined to provide it.

22 BISHOP: I don't have any problem. Just give me  
23 who you've been -- get me the name of who you've  
24 been dealing with and I'll send a letter.

25 But have you talked to Raymond Basin?

1 Because at our meeting with Raymond Basin, the  
2 Raymond Basin -- I can't remember. Ron Palmer, I  
3 think. Right?

4 NIOU: Ron Palmer.

5 BISHOP: Said that he would facilitate any  
6 information that you needed from any of the members.

7 BURIL: Okay. Take this off the record for a  
8 moment.

9 (Discussion held outside the record  
10 from 11:31 A.M. to 11:34 A.M.)

11 BURIL: Why don't we -- if you folks would like,  
12 I know we've kind of bounced around on the agenda  
13 here. I think we've covered item 1 and item 4. The  
14 next several are kind of long term. If you'd like  
15 to take a break for lunch, we could come back and  
16 kick off with item 2, let you know what's happening  
17 there. I think that would work out well.

18 BISHOP: That's fine with me.

19 BURIL: Great. Let's go ahead and take an hour  
20 for lunch. We'll meet back here at, say, quarter of  
21 1:00.

22 (At 11:34 a.m. a recess was taken  
23 until 12:57 p.m. of the same day.)

24

25

## AFTERNOON SESSION

12:57 P.M.

BURIL: Let's go ahead and look at number 2 on the agenda, then.

LOWE: Can we go back and talk about the schedule?

BURIL: Do you want to talk about that now? Sure. We can do that.

LOWE: We have a unique proposal for you.

BURIL: Oh, boy.

LOWE: And that is, you know we're concerned about OU-3 and getting that done quickly, as quickly as possible. I think it's more important to streamline that than the other two operable units.

So one idea that we had for cutting some time off the proposed plan is for the RPMs to write that together after the draft-final FS is issued and just set aside a couple days on a laptop, have all the RPMs come together and work on it. And that can get rid of this long review period.

ROBLES: The review period for JPL is a requirement of the prime contract.

BURIL: I have no authority to go around that. That's been mandated to me.

1       LOWE: But then it's no longer a JPL work  
2 product.

3       BURIL: Which would also be a problem for JPL, I  
4 would think, because we are talking about something  
5 that we're obligated contractually to NASA to deal  
6 with. So that's troublesome.

7       LOWE: Can NASA relieve JPL of their contractual  
8 responsibility to provide that document?

9       BURIL: That's a lot simpler than it sounds.

10       ROBLES: We'd have to cancel the task order.

11       BURIL: This is a portion of a billion dollar  
12 contract per year, multi-year contract. That's a  
13 pretty rough row to hoe.

14       ROBLES: I have no problem with the concurrent  
15 review proposed by EPA but I cannot obligate JPL on  
16 this issue.

17       BURIL: I would have to check. Like I said,  
18 when it comes to something like this I would have to  
19 get authority from contracts management office and  
20 the office of general counsel.

21       ROBLES: The problem is that JPL wants to look  
22 at these documents while considering the issues that  
23 just have happened.

24       BURIL: How much time would you anticipate  
25 actually saving, Debbie?

1       LOWE: Well, you didn't put the date for issuing  
2 the draft-final proposed plan on here. So if you  
3 let me know that, I'll tell you.

4       BURIL: Let me see if I can find that.

5               You're talking about the draft-final ROD  
6 submission?

7       LOWE: Issuing the draft-final proposed plan.

8       BURIL: Draft-final proposed plan.

9               You know what, because we don't have a  
10 step to issue a draft-final proposed plan it went  
11 from -- this is the same for all of the operable  
12 units.

13               It goes from prepare the draft-final FS,  
14 which is submitted for review on March 26th to NASA  
15 and the agencies. We then begin the preparation of  
16 the draft proposed plan on that next day. We submit  
17 that in May of '98, May 21st. Then there is the  
18 concurrent review for a month. And incorporation of  
19 comments, which is complete by July 6th of '98, at  
20 which point it's announced for public availability  
21 and comment.

22       LOWE: So July 6th is the date that it goes out  
23 to the public?

24       BURIL: That's correct.

25       BISHOP: You begin it March 27th?

1 BURIL: You would have it in your hands May  
2 21st.

3 BISHOP: No, but you start on it March 27th.

4 BURIL: That's correct. We start on it the day  
5 after the submission of the FS, draft-final FS.

6 LOWE: April, May, June. So it's taking three  
7 months from when the draft-final FS comes out to  
8 issuing the proposed plan to the public.

9 BURIL: One of those is a mandatory month-long  
10 concurrent review.

11 LOWE: Yes.

12 BURIL: That's mandatory to NASA and the  
13 agencies. That's in the FFA. That's what's built  
14 in.

15 LOWE: Yes. Well, the time frames in the FFA  
16 can be shortened by mutual consensus of the RPMs.  
17 And so what --

18 BURIL: Which would be fine.

19 LOWE: -- I'm proposing is that if we all work  
20 together in writing this document, then, you know,  
21 it should address most of the concerns of all of the  
22 agencies and recognize that we'll all need to go  
23 back to our respective agencies and perhaps have  
24 legal review or public participation review.

25 I think Richard had said that his public

1 participation specialist could probably come and sit  
2 in on this, you know, two-day session with us. So a  
3 lot of the concerns would be addressed in probably,  
4 you know, a two-week review by our agencies.

5 I see cutting two months off of that  
6 process.

7 ROBLES: I would be involved in it from the NASA  
8 standpoint.

9 BURIL: I'll tell you that the idea of having  
10 something that goes out to public comment and review  
11 that ultimately has public meetings and everything  
12 else generated with it, I can feel fairly confident  
13 JPL is going to say no. Because that is just too  
14 much public involvement to rush into this, from  
15 JPL's perspective. They want to have this thing  
16 done --

17 GEBERT: The agencies are the ones who conduct  
18 the public meeting, though, not JPL.

19 BURIL: That's not the way I understand it. The  
20 agencies are involved, but we're actually the ones  
21 that are setting everything up.

22 ROBLES: NASA is.

23 LOWE: NASA is.

24 ROBLES: We've delegated to them the day-to-day  
25 Superfund operations.

1 BURIL: It's just the amount of time to be able  
2 to generate all this, get everything set up and do  
3 all these things, get it all through the hoops and  
4 bells and whistles.

5 LOWE: The plan is a recommendation by all of  
6 the agencies, including NASA, on, you know, the  
7 proposed remedy for this operable unit. I think  
8 that to the extent we can all work together and  
9 everybody feels comfortable with it, that we'll all  
10 be in better shape at the public meeting in saying,  
11 "Yes, this is what I want. This is what's in the  
12 proposed plan and I stand behind it."

13 BURIL: Well, I would want that regardless.

14 LOWE: I think we're much more likely to get  
15 there by working together on it in a session like  
16 I've proposed than having JPL write it, having  
17 comments on it and, you know, your traditional  
18 process.

19 And I think, you know, DOD has been really  
20 good about looking for ways for streamlining and not  
21 sticking to this rigid 60, 30, 30, 30 FFA schedule,  
22 but looking for ways, you know, to shorten the  
23 process, speed things up, work more together as a  
24 team.

25 BURIL: If the RPMs want to cut back on their

1 review time, I would support that. I have no  
2 problem with that.

3 But JPL's position has always been that  
4 when we deliver a product to NASA it will have gone  
5 through the appropriate QA/QC that JPL goes through,  
6 regardless of the kind of project that it is, be it  
7 Superfund or anything else, so that when we hand  
8 them a product we can say "This is our submission to  
9 you as your contractor and we are comfortable in  
10 making sure that you understand that we have done  
11 everything we can to make sure it is a good work  
12 product." You're asking us not to do that.

13 BISHOP: No. What we're asking you to do is to  
14 do it jointly and it is no longer from JPL to NASA,  
15 it's from the --

16 BURIL: That's the issue.

17 BISHOP: -- it's from all of the signed  
18 agreements.

19 BURIL: See, our responsibility in our contract  
20 is with NASA.

21 ROBLES: And I'm talking about the contract. I  
22 can't do that right now.

23 BURIL: I mean, in concept what you're saying  
24 makes some sense. But we're bound, both Peter and  
25 I, are bound by the contractual issues that,

1 unfortunately, supersede that kind of approach.

2       LOWE: So if you have all these things in this  
3 contract you can't just say, "Oh, well, you know,  
4 something's happened, I don't want you to do this  
5 one"?

6       ROBLES: I don't have the authority. I'm not  
7 the contracting officer. I have to go to NASA  
8 headquarters. And until they take the program over,  
9 we are bound by it.

10       LOWE: So it's not a modification that the  
11 contracting officer can make?

12       BURIL: Not without going through very rigid  
13 review by JPL.

14       ROBLES: If we request modification of that task  
15 order we're talking about a six-month negotiation  
16 with JPL.

17       BURIL: And we can either accept or deny it.  
18 They do not have unilateral ability to change the  
19 contract.

20       ROBLES: The only way I could do that is I have  
21 to novate the task order with Chuck and take the  
22 program over 100 percent. Then Chuck is just an  
23 innocent bystander. And then when they say they  
24 don't want the document out there, I say "Sorry,  
25 you're not involved in the process." Until I novate

1 the task order and the contract, I can't do that.

2 SMITH: This is really strange.

3 ROBLES: It is. It is, because we have -- JPL  
4 is running the facility and the program for us.  
5 That's what we have right now. This is one of the  
6 problems.

7 MS. SMITH: But it's not just about the  
8 document. It's about the responsibilities of the  
9 federal agency of which JPL is not a federal agency.

10 ROBLES: Exactly.

11 SMITH: It's about your responsibilities as a  
12 federal agency to be sitting at the table and  
13 presenting recommendations for expenditures of  
14 federal funds. It has nothing to do with  
15 contracting. This is extremely -- this is a very  
16 strange arrangement.

17 ROBLES: It is. It is. That's one of the  
18 reasons why there is -- and I'll be frank with you,  
19 that is that we're looking in the future that we may  
20 have to take this program over, because the issues  
21 are getting that hot.

22 BURIL: But recognize that it's not an issue  
23 regarding the need to change contracts. This is  
24 something that's come up -- this is the first time  
25 that I have seen in five years that you've asked to

1 generate a document in tandem, which has been  
2 completely new. There has never been a precedent  
3 for that in this entire program.

4       LOWE: Well, we do it. All of our other  
5 military bases --

6       BURIL: I'm saying in this program it is new.

7       BISHOP: And the reason for it, Chuck, is that  
8 because every time there's any idea of trying to  
9 streamline it's always blocked by a contractual  
10 problem. So what we're trying to do is find a way  
11 to avoid the contractual problem.

12       BURIL: Unless Peter is willing to pull the  
13 program completely, there is, as he indicated, a  
14 review process by which Cal Tech can either accept  
15 or deny to accept that change. And if Cal Tech is  
16 going to be involved as deeply as we are in this  
17 program, and we are involved right up to our  
18 eyeballs in this thing, if we are going to be  
19 involved in this, then Peter is going to have to  
20 justify extremely well, and I would hazard a guess  
21 that Cal Tech would opt not to accept, in which case  
22 you'll go through several months of negotiation and  
23 be back to where you were.

24       BISHOP: Now what about -- there must be  
25 contingencies for situations that are, you know --

1 BURIL: We're talking about this in '98, right  
2 in the middle of contract negotiations.

3 LOWE: 3/26/98.

4 BURIL: You're going to have to have the  
5 contract changed, accepted and signed before this  
6 could go into place. That's not going to happen  
7 until October of next year at the earliest.

8 ROBLES: No. The issue is the task order. The  
9 issue is the task order.

10 BURIL: Task order currently is extended to  
11 2000.

12 BURIL: I think the key question is: Are you  
13 willing to accept this? And this is a review  
14 process that we've had in place from --

15 ROBLES: Right now I can't.

16 BURIL: -- the beginning of this program. I'm a  
17 little frustrated, quite honestly, because we've  
18 gone ahead and moved this thing up at your request.  
19 We've cut a year off this schedule. And now you're  
20 looking to try and pull two more months out by  
21 making it difficult for me to get my job done. I'm  
22 a little frustrated with that.

23 BISHOP: Well, Chuck, you know, this project has  
24 now gone on for four years. Essentially, we're now  
25 saying it's going to take us four more years to

1 actually do anything. The response has always been  
2 "Well, we can't contract with Foster Wheeler because  
3 we've got to go through these contracting -- we  
4 can't change anything that we're doing because we've  
5 got to meet with our contractor."

6 BURIL: This is something that has been a  
7 problem and, in fact, I've able to resolve that from  
8 this point on. I have not been able to do so prior  
9 to this. If you're talking about trying to change a  
10 federal procurement process as it applies to  
11 contractors, I wish you all the luck in the world,  
12 because I would love to do it.

13 BISHOP: What we're trying to do is find, is  
14 there any way to -- how do I say it without -- is  
15 there any -- are there any unique solutions that we  
16 can look to to try and move the project without  
17 running into bureaucratic barriers. We're trying to  
18 come up with them. We're not trying to --

19 BURIL: That's fair. I have no reason to say  
20 that that's a poor idea.

21 BISHOP: -- attack you personally. But you  
22 know, every one we come up with there's always a  
23 contracting issue. So we're just trying to -- we're  
24 going to keep trying to find new options that may,  
25 you know, move the project along.

1       ROBLES: Right now, the way that it's set up is,  
2 I can't. I don't have the authority in this office.  
3 It's going to have to go back to NASA headquarters.  
4 Things are going to -- may be changing. I'm not  
5 sure. But right now I can't.

6       BISHOP: I don't expect to have an answer. One  
7 of the things that we thought of a couple months ago  
8 was looking at an interim ROD, which seems to be  
9 helping OU-3.

10       BURIL: Yes. By all means.

11       BISHOP: And we're going to continue. Every  
12 time I come back to the office all I get is, "What  
13 do you mean you're not ready to go forward? What do  
14 you mean it's going to take another 18 months to get  
15 an RI out?" They've been moving this project. Hank  
16 hasn't been involved in this project in seven years,  
17 whatever it is. As far as he's concerned, he  
18 doesn't understand why, because he doesn't sit in  
19 all the meetings and see each step of the process.

20       BURIL: Sure. That's understandable.

21               I'm more than willing to talk about the  
22 things that we have control over. Certainly moving  
23 the ROD into an interim status and being able to  
24 recognize some of the things that we could do there  
25 was fine. Here is the schedule that says how we

1 were able to do that.

2 ROBLES: Can we table this? Chuck, can you ask  
3 your people about expediting the review process on  
4 your side? Because it's not going to be resolved  
5 here right now. You have to ask that of your  
6 leaders. Because I have no problem with it. But  
7 the thing is it's only going to be me and I will be  
8 working with them. But it's got to be within  
9 internal. And I can't preclude that right now.  
10 That's a contractual issue that I'm bound by. If  
11 your folks say they need those times, then they need  
12 those times.

13 BURIL: That's what they're saying now. I can  
14 ask.

15 ROBLES: Just tell them what the RPMs are  
16 seeking.

17 BURIL: Can we take a five-minute break?

18 (A recess was taken from  
19 1:15 P.M. to 1:23 P.M.)

20 BURIL: What I will do is this; I will go to my  
21 contracts managers and my general counsel. I will  
22 tell them what you'd like to do, see if there is a  
23 mechanism that will assuage their fears that I fully  
24 anticipate, given the fact that we're talking about  
25 something that's basically becoming pretty much line

1 by line a feasibility study or something similar to  
2 that, see if they'd be willing to accept the idea  
3 that it's been fully reviewed within the feasibility  
4 study already, and move from that.

5 So it's a reasonable suggestion. It's a  
6 reasonable request. Let me take it forward, see  
7 what I can find out.

8 Anything else on that one?

9 LOWE: No.

10 BURIL: So what do we want to do as far as the  
11 consent agreement, then? Do we want to table it for  
12 the time being as well? What are your thoughts on  
13 that?

14 LOWE: I'd say we go ahead and sign it today and  
15 then if we get the go-ahead to streamline it --

16 BURIL: We can modify it then.

17 LOWE: -- we'll modify it then.

18 BURIL: Sure. That seems reasonable. Okay.

19 Good.

20 Well, when Pete gets back --

21 Who has that, by the way?

22 BISHOP: It's right here.

23 GEBERT: Right here.

24 BURIL: Go ahead and pass it around as you have  
25 a chance there. We'll sign that up and I'll put the

1 noose around my neck and we'll be going to work.

2 Okay.

3           Number 2 on the agenda, since we've been  
4 bouncing around a bit, the ATSDR Visit and the  
5 Coordination. I think this is just an update more  
6 than anything else.

7           The dates have bounced around a little bit  
8 because of vacation times and things like that. I'm  
9 waiting to confirm that we have a scheduled entrance  
10 conference, which is what we call it, when they  
11 first come and tell us everything they're going to  
12 do, and so forth.

13           We're talking at this point of August  
14 12th, that they will be here and physically ready to  
15 begin their work. August 13th, based on the current  
16 understanding of what it is they do, would be the  
17 day that they would be making themselves available  
18 for public input, I guess is the best way to put it.  
19 Whatever form that takes shape as, I don't know. It  
20 may be a public meeting in a public place where  
21 people could come in, whatever. That's up to them.  
22 We'll be helping them out to try and get that  
23 squared away.

24           They did not indicate that they would be  
25 here a long period of time. I got the impression

1 that just that week would be all that would be  
2 required for them to be able to get the information  
3 that they need from the site and then ultimately  
4 take back everything else that they have and  
5 generate the reports.

6 Debbie, is there anything else that we  
7 should be prepared to deal with as they come along?  
8 I want to have everything kind of set for them so  
9 they can work as efficiently as their schedules  
10 indicated.

11 LOWE: I didn't realize that they were planning  
12 to do their public involvement process as part of  
13 their first visit.

14 BURIL: It seems like it.

15 LOWE: So that will probably take some  
16 coordination in terms of getting hold of their  
17 mailing list or talking with key people that they  
18 may want to talk to.

19 BURIL: Our public affairs folks and their  
20 public affairs folks have already spoken. So that  
21 is going.

22 Anything else that you can think of? Is  
23 it unusual for them to go to the first meeting with  
24 the public affairs interaction?

25 LOWE: I don't know what's usual. I just

1 thought that they wanted to come out and talk to you  
2 guys first, get a feel for the site.

3 BURIL: That happens day one. Then day two they  
4 go to the second half. That's fine. I mean, that  
5 doesn't really pose that much of a problem for us as  
6 long as we're knowledgeable and can prepare for it  
7 and we can be sure that things are set up for them  
8 so they have the opportunity to keep to their  
9 schedule. That's fine.

10 Any questions on that one? That's just a  
11 quick update on that.

12 BISHOP: Have you heard, do they want any  
13 involvement from the other RPMs? Are they going to  
14 want to talk to any of us?

15 LOWE: I'm sure they will, yes. I've given them  
16 all of your names.

17 BISHOP: Okay.

18 BURIL: And phone numbers and addresses. Okay.

19 Monitoring report changes and the contour  
20 maps. Mark, why don't you break out the geologic  
21 cross-sections we have and kind of walk us through  
22 that and some of the other things you've done as  
23 well.

24 CUTLER: What we did is we put together some --

25 It sounded like after the last RPM

1 meeting, for these contour maps for the quarterly  
2 report you wanted cross-sections so the aquifer  
3 could be sliced. And we wanted to base those slices  
4 on something maybe real, some geological reason.

5           So what we did is we have made a first  
6 pass at proposing something to you guys. What  
7 basically we have here, these 11 by 17s, there's two  
8 sets. One set are blank cross-sections so if you  
9 guys want to do your own drawing or your own  
10 correlation or do your own thing, you have a set.

11           This other set with the shades on it, this  
12 is our first pass at an interpretation.

13           This upper sheet of the site, of course,  
14 are the cross-sections. Just a quick note on that.  
15 We know where the bulk of the contaminants are in  
16 the center of the site. You can see the  
17 cross-sections kind of radiate out from the center  
18 of the site, in a sense. So that was some of the  
19 rationale for where we picked them.

20           In interpreting these cross-sections  
21 you'll notice at the base of each location there is  
22 a little hydrograph. These are from the screens in  
23 the West Bay wells. And being shrunk down, we can  
24 read them because we're used to dealing with them.  
25 But we gave you a set of the full-blown hydrographs

1 in case you want to go back and convince yourself  
2 what screen is what curve.

3 To give you an idea on how we did some of  
4 our interpretation -- do you have the AA  
5 cross-section, the one right on top?

6 LOWE: Yes.

7 CUTLER: Look at Well 19 right in the middle.  
8 If you look at the hydrograph, the way this  
9 typically goes is the upper screen is the upper  
10 curve and the bottom screen is the bottom curve.  
11 They all go this way. There's one exception in  
12 here. I won't get into that now. So you can look  
13 at screen 1 is separated from screens 2 and 3 with  
14 water levels track in screens 2 and 3. Then it's  
15 separated even more from screens 3, 4 and 5.

16 Does that make sense?

17 So if you look on the cross-section on  
18 Well 19, screen 1 is separated from screen 2 by a  
19 silt interval. Screens 2 and 3 are in the same  
20 slice, as you will, separated by a silt interval.  
21 And screens 4 and 5 are in the same slice.

22 If you look at these logs, there's sands  
23 and silts coming and going everywhere. We've spent  
24 a lot of time trying to correlate individual sand  
25 packages or silt packages. You get 100 geologists

1 and you're going to get probably 200 different  
2 interpretations.

3           So what we've tried to do is break it down  
4 into maybe larger packages where the interval number  
5 1, the upper interval, is kind of an upper sand-rich  
6 interval in general. The second interval, the  
7 silt-rich interval, you can see it there. Well 19  
8 is a good example. See where screens 2 and 3 are?  
9 The electric log is far to the left. You have a  
10 silt-rich interval in there. Interval 3 has kind of  
11 been nicknamed a sawtooth interval because --

12           Well, a better example is on the next  
13 cross-section, BB'. If you look at Well 17, there  
14 again in the middle, see that interval 3 where  
15 screen 4 is? See how the sands are better developed  
16 and the silts are well developed. You get kind of a  
17 sawtooth pattern on the electric log. That  
18 characteristic seems to be correlatable across a  
19 large part of the facility and off site. So it's  
20 kind of nicknamed the sawtooth interval just for  
21 draft purposes, for discussion purposes.

22           So we've broken this up into four -- or  
23 actually five different intervals. If you go back  
24 to cross-section AA', Well 20 on the very left, the  
25 only screen in interval 5 is this fifth screen in

1 Well 20. That screen is the deepest screen of any  
2 of our wells. That screen is in its own little  
3 world. If you look at the hydrograph, that upper  
4 line is really screens 1, 2 and 5. This seems like  
5 screen 5 in Well 20 is completely isolated from  
6 anything else that goes on on the site. Screen 5 is  
7 in its own separate world. It gets a whole separate  
8 layer. So for all practical purposes, the site is  
9 split up into, or the aquifer is split up into four  
10 slices.

11 NIOU: Screen number 5?

12 CUTLER: Screen number 5.

13 NIOU: According to this hydrograph, seems it  
14 goes quite well with screen number 1 on the top.

15 CUTLER: 1 and 2. Right. That upper line is  
16 three screens. They all track. But if you look  
17 everywhere else, on site, off site, screen 5 always  
18 gets drawn down.

19 NIOU: I see.

20 CUTLER: Pumps in the well, it gets drawn down.  
21 This one doesn't get drawn down.

22 NIOU: What you mean is it's similar to 1 and 2.  
23 Seems hydraulic connected, but not to the other  
24 first screening of other wells.

25 CUTLER: Right. So if you look on here, there's

1 a lot of silts between screen 5 and the rest of the  
2 world, and probably one of those is competent enough  
3 to isolate screen 5. It doesn't get affected by  
4 pumping. When they turn their pumps on, screen 5  
5 doesn't get affected. There's no draw-down. So  
6 it's off into its own world.

7 So there's really four layers, on this  
8 first pass, through the aquifer.

9 BISHOP: I'm assuming this is the bedrock here?

10 CUTLER: Yes.

11 You can kind of see in a conceptual way,  
12 this is what Chuck was talking about at the last RPM  
13 meeting with the groundwater model. Over here, Well  
14 21 and Well 14 over here on the west side of the  
15 site, all the screen intervals, the piezometric  
16 surfaces are all similar. It's a very sandy  
17 interval. You start moving to the west, you get out  
18 to the off-site areas, Well 20, you start picking up  
19 more and more silt. So this conceptual model to the  
20 west is sandy. You don't have these impermeable  
21 layers really affecting the hydrogeology. But if  
22 you go farther to the east the silts become more  
23 prevalent and seem to be acting as aquatards.

24 You can see that -- I guess on the other  
25 cross-section is where we have Well 14.

1 Cross-section CC' in a general sense shows the same  
2 thing. There's not very much silt in Well 4 -- no.  
3 Cross-section AA' goes right through the site. By  
4 the time it gets across site over to Well 18 you  
5 start picking up a lot more silt, or competent silts  
6 that seem to be affecting water levels.

7           So this is something you might want to  
8 just, if you have time, look at, see if you agree or  
9 would like different ideas on how to split this up.

10       BISHOP: There should be a set for each of these  
11 cross-sections, drawn and undrawn?

12       CUTLER: There's one cross-section that is  
13 undrawn, and that is BB'.

14       BISHOP: I couldn't find that one so I was --

15       CUTLER: Well, if you look at BB', you'll see  
16 why. We gave you an undrawn BB'. There's only one  
17 deep well on it. We're putting in Well 23 and Well  
18 24. There's blank spots on this cross-section.  
19 Once we get that data we'll be able to do some  
20 correlations. But there's nothing to correlate  
21 right now.

22       NIOU: No silt, no clay.

23       CUTLER: Right. So you have a blank one, but  
24 there is not one drawn up.

25       BURIL: Okay. Anybody have any questions

1 regarding what you're able to see? I know it's kind  
2 of tough to absorb all of this in one fell swoop.  
3 We can put this on the agenda for the next meeting,  
4 obviously, and talk about it after you've had a  
5 chance to look at it, or if you have any immediate  
6 questions, we could try to answer them now.

7 NIOU: Just a question. For the 23, 24 -- 22  
8 through 24, those geology, when we -- that  
9 information, those information may be available?

10 CUTLER: Yes. Once they get drilled, certainly.  
11 As soon as we get that information, yes, we want to  
12 put it on here.

13 NIOU: In three month?

14 BURIL: Whatever the schedule calls for. I  
15 don't remember.

16 CUTLER: It shouldn't take three months to get  
17 them installed, get them on line.

18 NIOU: Takes time to --

19 CUTLER: It takes time to make the log and --  
20 with everything else going on.

21 BURIL: As soon as we have them ready, we'll be  
22 able to give them to you. That's not a problem.

23 CUTLER: Those wells are going to be in good  
24 spots. I think those wells are going to fill some  
25 data gaps.

1 NIOU: Yeah. No doubt about that.

2 SMITH: There is another tool, which I don't  
3 know if you all have considered using, and that's  
4 looking at stable istotope ratios.

5 Dr. Brian Smith at Lawrence Berkeley  
6 laboratory who uses stable isotope ratios to look at  
7 communication, particularly in very complex  
8 aquifers, to evaluate the connectivity between  
9 different portions of the aquifer, and with your  
10 multiple screens you can look at like the stable  
11 isotope ratios. In the water you can tell whether  
12 you have an aquifer that's -- whether it's a leaky  
13 aquifer. And using a mixing model you can actually  
14 evaluate how connected they are. And that tool has  
15 been used very effectively on other sites in very  
16 complex situations like this if there's questions or  
17 differences of opinion as to whether or whether or  
18 not there is connectivity between different portions  
19 of the aquifer. It's not a very expensive tool,  
20 costs about \$100 a sample.

21 BURIL: These are samples that you take of the  
22 groundwater itself and then based on the evaluation  
23 of those samples for stable isotopes you can  
24 determine more or less what the connection is  
25 between various locations?

1        SMITH: Right. He was able to use it very  
2 effectively to show at Lawrence Livermore Laboratory  
3 that one of the plumes that they had was a result of  
4 influx of the sewer pushing a portion of the plume  
5 off site. Once they fixed their sewer line, they  
6 fixed their off-site migration problem. He was able  
7 to look at whether we were talking about -- we were  
8 talking about TCE in water that had been piped in  
9 versus TCE in water that was associated with the  
10 site itself.

11        BURIL: How did he come to choose stable  
12 isotopes as opposed to cation/ion evaluation?

13        SMITH: Because the detection limits are very  
14 much more sensitive. It's something like one part  
15 in a trillion that he can distinguish between the  
16 different -- the different types. So it's very  
17 sensitive. So anyway, it's a very useful tool.

18        BURIL: The tool, meaning -- is this a model  
19 he's developed, or just the knowledge of sampling  
20 like this?

21        SMITH: To measure and then to use mixing  
22 models. A very simple mixing model to look at the  
23 connectivity. There are different isotope  
24 signatures for different aquifers. Each aquifer has  
25 a slightly different isotope signature. And you can

1 distinguish between aquifers based on the isotope  
2 signature. Again, it's an extremely useful tool.

3 BURIL: That may be of some benefit to us down  
4 the road here.

5 CUTLER: We've been trying to use the ion and  
6 cation data, general mineral analyses, for the very  
7 same thing. We haven't had lot of time. We've  
8 generated a ton of data. Every quarterly event we  
9 have ion and cation data. And it changes with the  
10 pumping and recharge, and they turn the pumps off,  
11 you get flow changes, water levels go up and down 60  
12 feet a year. Our ion/cation data, it's very hard to  
13 find trends that are reliable. Maybe this --

14 SMITH: This may prove to be a useful tool.

15 CUTLER: What we're finding, too, is these pumps  
16 have a tremendous influence on the site and even  
17 though you have a certain layer, it seems like these  
18 pumps may be just pulling stuff right through a  
19 so-called aquatard. None of these may be really  
20 super competent, enough to affect piezometric  
21 levels. But I think the pumps are just wreaking  
22 havoc on everything.

23 BURIL: Mark, why don't you show them your  
24 preliminary stuff on the groundwater contours that  
25 you showed me in my office. The CTC and so forth.

1 CUTLER: Okay.

2 BURIL: Let's show them that just so they have  
3 an idea of how we're trying to pull things together  
4 here.

5 CUTLER: What we did --

6 BURIL: Not those. The aerial ones.

7 CUTLER: What we did, we tried to do a sanity  
8 check -- this is just a map of the layers -- a  
9 sanity check on these layers by plotting the  
10 concentrations, say layer 1, layer 2, just a quick  
11 outline, just to see if this is going to make some  
12 type of sense.

13 This is going to be very hard for people  
14 to see.

15 BURIL: Crowd around if we could.

16 CUTLER: This is a series of carbon  
17 tetrachloride. I'll just lay that out for you.  
18 This is layer 1, based on this map. The carbon  
19 tetrachloride, just a ring around wherever it was  
20 located. It's basically on site. It seemed to have  
21 really low levels here, and here so it's kind of a  
22 weird shape thing. It's extended to Well 10.

23 The second layer is starting to pick up in  
24 the lower screens off site. It's not in Well 3.  
25 Maybe this mounding is somehow affecting the shape

1 of this plume. We had years and years of drought  
2 and now we have something. Who knows.

3 BISHOP: Change the shape somewhat.

4 CUTLER: Yes, it's a weird deal.

5 Here is layer 3, a little bit deeper.  
6 It's not as widespread. It's a little more  
7 concentrated. And that may not actually be correct.  
8 There's some md's distribution here.

9 And then the bottom layer, there's no  
10 carbon tet at all.

11 So that's just a sanity check on these  
12 slices you're cutting through.

13 ROBLES: These reflect on these --

14 CUTLER: Those are those layers that you have  
15 here. Where there is a layer, where there's two  
16 screens in a layer, you see like a nondetect of 1.1.  
17 Well, we just went the highest level in that area.  
18 This is an issue we may get into later. But in that  
19 layer it was detected.

20 TCE --

21 BISHOP: Can I just take one quick look? I had  
22 a question about -- when we're looking at this shape  
23 we're using -- so we're using this, the wells with  
24 the --

25 CUTLER: Right. In layer 2 there's these two

1 screens. There's this one screen, these two  
2 screens, and these two screens and this one screen.  
3 So every screen that is in that layer has been  
4 marked, whether nondetect or detect. Where there  
5 are two numbers in this interval, just for these  
6 purposes here, there was a detect in that layer.

7       LOWE: I like this way of representing the data.

8       BURIL: I thought it was really good.

9       CUTLER: Right here at the source area, this  
10 deep well here we know what we're doing. Knock out  
11 some uncertainties.

12       BISHOP: I wanted to see. We really don't  
13 have -- you have these wells up here at the top  
14 where the spreading ground is so you can see this.  
15 You don't really have anything here just because we  
16 don't. This could actually be two.

17       CUTLER: It could be even more of a split.

18       BISHOP: Yes.

19       CUTLER: There's probably a ridge. We keep  
20 saying mound, but it's --

21       BISHOP: Probably a ridge. Right.

22       CUTLER: Depending on the time of year.

23       BISHOP: Right. Great.

24       CUTLER: Here is TCE. We did it for the three  
25 contaminants of concerns. The upper layer of TCE.

1 Chuck didn't like this one where we connected it, so  
2 keeping in mind this is not --

3 BURIL: The reason I didn't like it, I'll point  
4 it out to you. If you look at the concentration at  
5 Well 5 and Well 10 and compare it to Well 21, it  
6 doesn't make a lot of sense that you would actually  
7 see concentrations increasing as you move away from  
8 the source. So it leads me to think there is  
9 something else going on there, which is part of what  
10 we're doing an investigation on now.

11 CUTLER: Disconnect, especially when it flows  
12 like this, but for our purposes, we just --

13 BURIL: It's reasonable to take a look at for  
14 the time being.

15 CUTLER: Then as you go to the next step down,  
16 layer 2, you're picking up TCE in the upside,  
17 upgradient wells. Very low levels, but it's there.  
18 And of course higher levels in here.

19 The next layer down, the third layer, it's  
20 only in one well. And then the very bottom layer  
21 it's in the same wells. So it's just kind of --  
22 it's got a weird -- if you can try to picture this  
23 in 3-D, it's got a weird -- there again, I think  
24 it's a reflection of some of these guys, because  
25 they're just sucking it right down in there.

1 BURIL: The PCE one I found is very telling,  
2 which is why I looked at that top TCE one and kind  
3 of questioned it.

4 CUTLER: Here is the PCE. The upper layer,  
5 we're only finding at very low levels, the  
6 upgradient well, of course, and a couple of on-site  
7 wells.

8 This next layer down, it's in the  
9 upgradient wells, not on any on-site well, and at  
10 lower levels in the off-site wells again. Very much  
11 an upgradient source, it looks like.

12 Layer 3, the very same thing. Upgradient,  
13 and then the off-site wells. Very much looks like  
14 an on-site source.

15 And the very next layer down, the same  
16 thing. It's not detected up here, but it is in 17.

17 BURIL: The thing that struck me is when you  
18 compare that to the TCE here, we know we have TCE  
19 here on site. We know that this is here. If you  
20 were to take and close a contour here somewhere,  
21 pick a point and close a contour here, this kind of  
22 a shape would follow very closely with what we're  
23 seeing in terms of PCE down further. You see this,  
24 then you come down one more, you'll get in deeper.  
25 You begin to see similar patterns, which may lead us

1 to believe, and give some support to the idea, that  
2 we do have something that's coming in. Now, whether  
3 it has a significant complement of TCE or not is  
4 something that we still have to figure out. But  
5 certainly PCE certainly looks to be coming from  
6 upgradient from us.

7 CUTLER: The PCE, everywhere that we detected  
8 it's below the MCL level.

9 ROBLES: I like these.

10 BURIL: This was a very telling story.

11 CUTLER: We're not seeing it here. We don't  
12 have any deep screens here.

13 BURIL: Right.

14 CUTLER: So we've got --

15 BURIL: So it may be that that second layer is  
16 more permeable in terms of its ability to transmit  
17 contamination. But the fact that we would find it  
18 on our site may only be an indication it is coming  
19 onto our site from upgradient. Because as you look  
20 deeper, you still see it off site in a deeper area  
21 and located to the south of JPL. So it looks to me,  
22 at least at the outset here, it looks to me like  
23 it's coming right down what I've been calling for a  
24 long time the Foothill funnel, right between these  
25 two sets of hills, and coming into the Arroyo and

1 moving according to whatever spreading, pumping and  
2 whatever else is going on.

3 A lot of the work we're going to be doing  
4 with our next three wells will either support or  
5 push back that kind of a theory. I think that those  
6 will be very helpful to us to understand exactly  
7 what's happening there. Certainly it will maybe  
8 raise a few eyebrows up in La Canada. I don't know.  
9 We'll have to see what happens.

10 BISHOP: It will also help -- you have a lot of  
11 information on the shallow zone on site. You just  
12 don't have as much information on the deep zone.

13 BURIL: That's the thing, is that it almost  
14 looks to me like we've got a deeper plume, deeper  
15 meaning deeper than the top layer, coming in from  
16 off site with PCE. Maybe other things are happening  
17 shallower. It's hard to tell. But basically what  
18 Mark had there seems to be pretty telling that  
19 there's something coming in from off site. This  
20 deeper information we get on site will help to  
21 clarify that.

22 Okay. Any questions on those? Are these  
23 the kind of things that you folks were looking for  
24 in terms of data presentation and quarterly reports,  
25 whatever else?

1 NIOU: Yes.

2 LOWE: Yes.

3 NIOU: Exactly.

4 BURIL: Home run, Mark. Good job.

5 That's basically all we needed to talk  
6 about on that one, so hopefully we'll be able to  
7 formalize those a little better so that they aren't  
8 hand drawn and you start incorporating those into  
9 the monitoring reports.

10 CUTLER: Shall we just go ahead, until we hear  
11 otherwise, on this next quarterly report use this  
12 framework?

13 BURIL: Yes. I think so. Is that agreeable to  
14 all of you?

15 GEBERT: Yes.

16 NIOU: Yes. Those are great.

17 BURIL: Great. Let's go ahead and plan on that,  
18 then.

19 CUTLER: Okay.

20 BURIL: That brings us up to number 4, which I  
21 guess has already been discussed to some degree.

22 Let me just touch on a couple other things  
23 here that kind of fall out of this, not specifically  
24 these points that are listed, but let me just point  
25 out a couple of things here.

1           One of the things that you folks may have  
2 seen, I think I probably have two stacks of these,  
3 ones that I brought. Peter, did you keep the ones  
4 you brought that have the other thing attached to  
5 it?

6           ROBLES: Yes. I passed them out.

7           BURIL: Oh, you passed them out already.

8           ROBLES: They all have that.

9           BURIL: This is just the newspaper article by  
10 itself. The thing that Pete gave you has got the  
11 newspaper article and something else. This is just  
12 so you're informed of all the --

13          ROBLES: It's the legal action.

14          BURIL: -- other things that are going on here  
15 in terms of potential issues as far as what we may  
16 be forced to deal with at some point in the future.

17                 The top one is an article which appeared  
18 in the Tuesday edition, I think, of the Pasadena  
19 Star, whatever the date is that shows on top.

20          LOWE: Wednesday.

21          BURIL: Wednesday. It appeared in the Pasadena  
22 Star-News. The reporter, Robin Lloyd, had contacted  
23 JPL. You even see my wonderful name quoted there.

24                 A lot of the things that are in this story  
25 quite literally are either inaccurate or complete

1 fabrications of things, such as the St. Bede's  
2 facility being downhill from JPL. No. Both  
3 topographically and water gradient considerations  
4 are uphill. It's up here on the top of the hill in  
5 La Canada.

6           It says that we admit to dumping. No, we  
7 don't. We don't admit to dumping anything. I think  
8 that's one aspect that causes us trouble only  
9 because it presumes some form of guilt. And  
10 certainly at the time this was taking place there  
11 was nothing that said we shouldn't be doing it, and  
12 we're trying to deal with it now. We take some  
13 umbrage with that kind of portrayal.

14           Most everything else is fairly innocuous.  
15 There isn't anything there that rattled the cage, so  
16 to speak. I wanted to be sure each of you had a  
17 copy of that so you know what's happening here  
18 within the local media.

19           I will pass along to you, too. I don't  
20 know if Debbie mentioned to you she was contacted by  
21 the L.A. Times. We're expecting that sometime this  
22 weekend a fairly extensive article regarding the  
23 lawsuit here in La Canada and JPL/NASA's role. I  
24 know Debbie was contacted. I don't know if  
25 Richard --

1 GEBERT: I was contacted too.

2 BURIL: Were you? Okay.

3 Jon, were you contacted?

4 BISHOP: Yes, but he called when I was out of  
5 the office. So I never actually talked to him. I  
6 left him a message also.

7 ROBLES: You'll probably be misquoted.

8 BURIL: "Could not be reached for comment,"  
9 would be my guess.

10 GEBERT: We have a policy, whenever we're  
11 contacted by anybody from the press, we call our  
12 supervisor and we have a public information officer.

13 BURIL: That's good.

14 GEBERT: Even the smallest question I always  
15 make sure they're present.

16 LOWE: My public affairs officer was on the  
17 phone when I did the interview also.

18 GEBERT: It may not prevent misquoting, but it  
19 at least helps.

20 BURIL: Well, it at least helps. Judy and I  
21 have gone through -- Peter has too. Judy and I have  
22 gone through some fairly extensive media training to  
23 deal with folks and be sure we understand how to  
24 portray the questions and so forth. She sits in on  
25 all the calls when we get them, because I'm acting

1 as a laboratory spokesman on this and if we get  
2 enough time, we get Peter in on it, too, to be right  
3 there shoulder to shoulder with us.

4 I spoke with an individual from the L.A.  
5 Times I'd say, between two conversations, probably  
6 about an hour and 15 minutes, hour and a half,  
7 something like that. So they are doing a fairly  
8 in-depth review/article of this whole scenario here.

9 I have no idea how it will come out. The  
10 only thing that I do know is that they said that --  
11 he said that he hopes that it gets printed because  
12 it was "pretty dam long." So we'll see what  
13 happens. That's just a heads up for those of you  
14 living in the L.A. area. If you've got the L.A.  
15 Times, my guess is that it will appear in the Valley  
16 Edition. Not the main edition, but the Valley  
17 Edition.

18 LOWE: It's in the main edition.

19 BURIL: Oh, it is in the main edition? He told  
20 you that. He didn't tell us that. So keep your  
21 eyes out. It will be there, hopefully, either  
22 Saturday or Sunday is my guess.

23 LOWE: Do you know anything about these 11  
24 residents?

25 BURIL: I have not seen the amended complaint at

1 all.

2 ROBLES: They're in the back of that paper  
3 underneath there.

4 BURIL: Maybe that's what Pete can talk to.

5 ROBLES: That sheet, those are the individuals  
6 that have been placed on it, and it's growing.  
7 We're up to 16 and they're growing more.

8 NIOU: 14?

9 ROBLES: 14. I'm sorry. 14.

10 LOWE: So what kind of information is actually  
11 in the attachments? Nothing?

12 ROBLES: No.

13 LOWE: It talks about each of those people.

14 ROBLES: No. That's just the names of the  
15 people that are on the lawsuit. I don't know what  
16 the attachments are. That came out of an  
17 appointment source, Tim Walthall, who is the DOJ  
18 representative for the government now.

19 I'm supposed to have a deposition with  
20 another case, a workmen's comp case here. But the  
21 people -- this case is called Vallier. The Vallier  
22 lawyers will be there, the Cal Tech lawyers will be  
23 there as well as the government lawyers, watching me  
24 speak. So it's getting pretty intense.

25 BURIL: Now, one of the things that you may see

1 in the article that comes out, it wouldn't surprise  
2 me, is that in this case Vallier actually pressed it  
3 against Cal Tech. And Cal Tech, in reviewing the  
4 situation, viewed it appropriate to enjoin the U.S.  
5 government as well. So now it's Vallier versus Cal  
6 Tech and the United States government.

7 ROBLES: We told them not to do it. They went  
8 ahead and did it.

9 To answer -- what's your name?

10 SMITH: Bobbye Smith.

11 ROBLES: I wanted to give you -- you can pass  
12 this around because you asked about what are the  
13 issues. I wrote this because everybody constantly  
14 asks, because this is a very strange relationship  
15 here. You have to understand why we can't just  
16 automatically do stuff here like we would do in a  
17 normal contract.

18 SMITH: We'll have a legal analysis and make a  
19 recommendation to you.

20 ROBLES: Greatly appreciated.

21 BURIL: I think that's everything I wanted to  
22 bring up to you folks in terms of what's happening  
23 with media and other related things.

24 It's going to be a busy month, I think,  
25 between newspaper articles, litigation, water

1 analyses for various constituents that heretofore  
2 have not been recognized. We're going to have a lot  
3 of changes in the course of the next month or so to  
4 the project, given certain events occur, such as  
5 perchlorate has become an issue, and so on.

6 We've got under Other Issues here, number  
7 5, the Status of 3rd Party Concerns. I think the  
8 articles here kind of summarize it.

9 I will pass along to you that we are  
10 working with Lincoln Avenue. We are still in  
11 settlement negotiations. There is appearing to be  
12 somewhat of a disparity between the categories of  
13 settlement that NASA/Cal Tech is recommending be  
14 dealt with in the settlement and what Lincoln Avenue  
15 is requesting be dealt with in the settlement. That  
16 is under negotiation so I don't want to say anything  
17 more than that. But we thought we were further  
18 along than we truly are. And exactly how that pans  
19 out is to be determined.

20 In terms of public participation issues,  
21 one of the things that we thought of here at JPL,  
22 and I've talked with Pete briefly about it, on the  
23 presentation to various entities --

24 LOWE: Actually, before we move off of the  
25 Lincoln Valley, a long time ago I had made a request

1 to see a copy of the contract between either NASA or  
2 JPL and the City of Pasadena.

3 ROBLES: For the --

4 LOWE: For the reimbursement.

5 BURIL: Didn't we give that to her?

6 ROBLES: Yes. We sent that to you.

7 LOWE: I never received it.

8 ROBLES: We mailed it to you. I'll have to get  
9 it again.

10 BURIL: I thought you had that.

11 LOWE: Okay.

12 BURIL: Sorry.

13 ROBLES: Do you have a copy of it?

14 BURIL: Probably somewhere.

15 ROBLES: My files are all messed up.

16 BURIL: Let's look for it.

17 LOWE: Your lawyers said "That's fine. Release  
18 it to EPA."

19 BURIL: That's a NASA document now so it's not a  
20 problem.

21 ROBLES: It's not a problem.

22 BURIL: We thought you received it.

23 ROBLES: I checked it out. It was not a problem  
24 with looking at it.

25 BURIL: Was that it?

1           LOWE:   Yes.

2           BURIL:   On public participation issues, one of  
3 the things that has come out of a committee that JPL  
4 formed, and that Peter is kind of a party to but not  
5 directly with the committee, is dealing with issues  
6 that revolve around the toxic tort litigation, and  
7 so forth.

8                   One of the things that we felt would be of  
9 benefit is to have a presentation made to selected  
10 government officials in the area, potentially folks  
11 in the La Canada City Council, the Pasadena City  
12 Council and things like that, because they're going  
13 to be seeing these things coming out in the  
14 newspaper. Some of them, even though we've sent  
15 them fact sheets and we've sent them information and  
16 so forth, may feel they've been caught flat-footed.  
17 So we're in the process of putting together a  
18 presentation to brief them on JPL and the Superfund  
19 program.

20                   Peter will be involved in that, no doubt.  
21 Myself, I'll be acting as a JPL spokesman. Judy  
22 will be there backing me up. I just wanted to be  
23 sure you folks knew that was happening.

24                   What we're planning on presenting is  
25 basically the same kind of information that we

1 presented in various presentations to you folks like  
2 the one we did to you, what was it, just about six  
3 months ago.

4       LOWE: For the Raymond Basin.

5       BURIL: Right. Or for the Raymond Basin. Same  
6 kind of information. That's just to let you know.  
7 If you have a desire to attend, please let me know  
8 because I would want to be sure that we're prepared  
9 to have you come along.

10       ROBLES: We would like it if you could attend.

11       LOWE: Are you going to open it up to more than  
12 just government officials?

13       BURIL: At this point, no, only because we're  
14 only trying to brief a select audience. At some  
15 point in time if there's a need to actually invite  
16 the general public in to try and bring them up to  
17 speed, we'd set up a separate meeting for that.

18       LOWE: I think it's a really good idea. I think  
19 articles like this have the potential to be very  
20 alarmist.

21       BURIL: Yes.

22       LOWE: I think it would be very good if you guys  
23 are being more proactive in going directly to the  
24 public and assuring them that there are no --

25       BURIL: That's one of the things that we're

1 pulling together on right now because we're doing  
2 this in kind of a phased approach. We're looking at  
3 the folks who represent their constituents, the City  
4 Council and things like that, to bring them up to  
5 speed immediately, and then to take a look at a  
6 second facet and be able to deal with the public  
7 subsequent to those kinds of meetings.

8 Exactly how we're going to do that we're  
9 not sure, but we're certainly looking at it. We're  
10 hiring an outside consultant to help, us other than  
11 Foster Wheeler, to help us in making sure that our  
12 presentations look good and carry the right  
13 messages, and so on.

14 But we'll be sure and let you know of  
15 these things. If you have a desire to attend, let  
16 us know. We'll try to arrange that for you.

17 LOWE: Okay.

18 BURIL: Go from there.

19 ROBLES: I'd also like to ask one thing, if it's  
20 possible, could you contact your public relations  
21 people. I would like to see, and NASA's position  
22 is, that before we go out your public relations  
23 people, we give them a briefing.

24 BURIL: Their folks?

25 ROBLES: Their folks.

1 BURIL: Sure.

2 ROBLES: And then say, "Is there anything we're  
3 saying that your agency has a problem with?"

4 BURIL: I would say that presentation should be  
5 to both public affairs and these folks. These folks  
6 are the ones on the front line.

7 ROBLES: Right. I would like to do that because  
8 I don't want to say anything out there to agencies  
9 they have a problem with. Because basically, we  
10 want to make sure we present a unified front. The  
11 fastest way to get that blown apart is we go out  
12 there uncoordinated with you guys.

13 BURIL: Currently the only thing that I would  
14 plan on presenting to them would be Raymond Basin.  
15 So you folks know all that. I didn't hear any  
16 dissenting comments or concerns regarding what was  
17 in that presentation. That would be the extent of  
18 it. If we added things to it, then I would say --

19 ROBLES: Your people might have suggestions what  
20 to do from experience in other things. Since we're  
21 getting into the public participation arena, we want  
22 to get your people involved so that they know,  
23 because this is --

24 LOWE: What kind of time frame are we looking  
25 at?

1 BURIL: For this first set of meetings?

2 LOWE: Yes.

3 BURIL: Probably the week after July 4th. The  
4 only reason it's going that quickly is because we've  
5 already got a presentation pretty well set. It will  
6 basically be the same one we had at Raymond Basin.

7 LOWE: I thought you said you were bringing in  
8 some outside consultants.

9 BURIL: That's the deal with the other aspects  
10 of things, subsequent to that. Since we're right  
11 here and we've got the newspaper articles out there  
12 and we already have a presentation you folks have  
13 seen, we feel pretty confident we could go ahead and  
14 just take that one and at least brief folks up front  
15 that are in positions of responsibility and  
16 authority. Then subsequent to that we'd have to  
17 make decisions on how to approach the general public  
18 and things like this.

19 ROBLES: Chuck, a suggestion is we could make a  
20 list of who we're going to make that first  
21 presentation to and run it by them.

22 BURIL: That's no problem. I don't see that  
23 being a problem.

24 ROBLES: So it's going to be the government,  
25 what exactly are their names.

1 BURIL: That's fine.

2 LOWE: Can we try and deal with that list at the  
3 same time we deal with the risk assessment question,  
4 while everyone is on the phone, except Jon?

5 BURIL: I can try. I don't know that we have  
6 all the people that we want to have identified yet.  
7 If we're talking about doing it next Tuesday, I'm  
8 not sure that I've got all the people that it would  
9 be. I can give you "a have" and we can augment it  
10 later. I'm just not sure. See, campus is involved  
11 heavily in this one, too. They have some players  
12 that I don't even know about that they would like to  
13 get involved. I have to coordinate with them to get  
14 that information. I'm not saying -- it shouldn't be  
15 difficult, but I'm not sure I'll have it for you on  
16 Tuesday of next week. Hopefully I will.

17 BISHOP: Peter, just let us know, because I'll  
18 plan to attend if I get the dates.

19 ROBLES: That's one of the things I would like,  
20 is that we consider your schedules. I want to make  
21 sure, because we want you guys to be there, if  
22 nothing else, to listen and understand the public's  
23 concern. Because your input is important. You may  
24 say, "We need to go into this area and we need to  
25 come together." I'm concerned because the

1 litigation is taking issues, and the political issue  
2 is becoming even more pronounced. And that's going  
3 to do -- not good for any of our agencies.

4 BURIL: Okay. Well, that's, I think, everything  
5 that we wanted to cover today.

6 We had left some time at the bottom of  
7 this for the site tour, which really would probably  
8 be -- I'm sorry.

9 CUTLER: One minor thing. 2-chlorethylvinyl  
10 ether.

11 BURIL: Oh, goodness. I'm sorry. I thought I  
12 covered that. Back up. Before we go to the action  
13 items, I did have one more thing on my list here  
14 that I wanted to mention.

15 During the course of our analyses of water  
16 samples we've been analyzing for MTBE and also  
17 2-chlorethylvinyl ether. Thus far we have found  
18 neither of these compounds in how many sampling  
19 rounds, Mark?

20 CUTLER: The MTBE, I'm not sure when it was  
21 added. We've been looking for it for two, three  
22 rounds.

23 BURIL: Basically, we haven't found either  
24 compound.

25 CUTLER: MTBE is not in our QUAP. The lab,

1 basically, it was on the suite of analyses. So it  
2 was -- 2-chlorethylvinyl ether is not required by  
3 this thing anymore, and we haven't detected that one  
4 either.

5 BURIL: So basically, what we'd like to ask is  
6 that, with your concurrence, and hopefully we can  
7 get it today based on the fact we haven't seen  
8 either of these compounds detected thus far, that we  
9 could get your concurrence to just drop these two  
10 compounds from the suite of analyses we've currently  
11 been reporting.

12 BISHOP: I don't have any problem since we've  
13 already done two rounds of sampling on it.

14 GEBERT: I don't see any problem either. MTBE,  
15 which would probably be associated with this site.

16 BURIL: I don't have that much experience with  
17 2-chlorethylvinyl ether. MTBE, in my experience,  
18 is generally associated with refined petroleum  
19 products, which we don't seem to have a problem with  
20 here either.

21 Great. Thank you all. Appreciate that.

22 Judy has stuck the old notes under my nose  
23 here saying we've got to go through action items.  
24 Here are the action items that we were going to  
25 address:

1           We were going to reissue a schedule with  
2 the primary documents called out, but I think all  
3 the ones that we've got there I think are primary  
4 documents. I think we're in good shape there.

5           We were going to get together for a  
6 planning meeting to agree on how we're going to  
7 divide the groundwater in layers and to track  
8 three-dimensional sort of concentrations. I think  
9 we've kind of done that here today. You've seen the  
10 way we've broken it up and how we intend to present  
11 it.

12           We were going to add tributyl tin samples  
13 at the top of the two screens for MW-4 and MW-8,  
14 which I assume is going on now.

15           CUTLER: That will happen this event.

16           BURIL: There is a note here regarding MTBE, and  
17 I think we've addressed that. This was about 4  
18 micrograms per liter as a mid range spike level. I  
19 don't know if you had --

20           CUTLER: I left a message for you. That's okay.

21           BURIL: So that's taken care of.

22           We would be discussing items 2 and 10 from  
23 the agency recommendations on groundwater reports  
24 for the next conference call. I think we got, with  
25 the conference call and this meeting, especially,

1 when we were talking about the contouring and so  
2 forth, I think we've got that one covered. I don't  
3 know if you folks remember what your recommendations  
4 number 2 and 10 were off the top of your heads.

5 CUTLER: 2 was the contour maps.

6 BURIL: 10 was the appendices.

7 CUTLER: Appendices, if you have any comments on  
8 how they were tabbed. I think you're right.

9 BURIL: So I think the appendices went out in  
10 the modified format this last time around, didn't  
11 they? So if you've had a chance to review the  
12 report, or if not and you have comments, please call  
13 us, tell us what you think. We'll try to  
14 incorporate it in the next one.

15 We were going to try to get a copy of the  
16 presumptive response guideline documents to Peter.  
17 From Debbie's expression, I think maybe that one  
18 might still be open.

19 I think that's it. It appears that  
20 everything else has been covered. So I guess we  
21 need to try to establish a conference call and a  
22 meeting time next time around.

23 First of all, let me ask --

24 NOVELLY: Do you want to go over today's action  
25 items?

1 BURIL: I just want to see if there's anyone who  
2 is desirous of going out to Well 17 and seeing  
3 what's going on there now. Richard, you're free to  
4 do it now if you would like to, or if you'd like to  
5 do it at a different time, either way.

6 GEBERT: How about now.

7 BURIL: That's fine. Sure. Anyone else who  
8 would like to go out and see a sample and watch the  
9 grass grow simultaneously is more than welcome to do  
10 so.

11 BISHOP: I've seen it.

12 LOWE: In terms of the site tour, we would  
13 rather spend -- well, you know, to stop by and see  
14 sampling, maybe, but to get off site and see where  
15 the off-site wells are, see where St. Bede's is.

16 BURIL: Bobbye, are you interested in taking the  
17 site tour regardless?

18 SMITH: This is why I'm here.

19 BURIL: Okay. Absolutely, then. I  
20 misunderstood. I thought the site tour was for Hedy  
21 if she showed up. But if you'd like to, by all  
22 means, we can do that without any problem.

23 GEBERT: Maybe I'll change plans and go with  
24 them and go on the tour. Because I've never really  
25 seen it.

1       BURIL: Really? Well, guess what, you're in for  
2 about an hour and a half snore.

3       LOWE: He's never been on site, just a little  
4 off site.

5       GEBERT: Right. I haven't seen everything.

6       BURIL: Not a problem. We can show you all over  
7 the place, wherever you want to go.

8               Judy, do you want to go ahead and go over  
9 today's action items so we have those laid out for  
10 us.

11       NOVELLY: We're going to get a copy of the new  
12 detailed schedule for Bobbye.

13               JPL will find out if Pasadena has taken  
14 more than one series of perchlorate samples and what  
15 those results were.

16               We're moving to get a meeting of the risk  
17 assessors to discuss which data to use for the  
18 health risk assessment.

19               Debbie is going to try to get us a copy of  
20 the Puente Valley FS that came out last week.

21               Jon is going to attempt to assist us in  
22 getting the influent and effluent data and the  
23 groundwater monitoring concentrations in wells from  
24 Lincoln Avenue.

25               Peter or Chuck will send another copy of

1 the treatment plan agreement between NASA and the  
2 City of Pasadena to Debbie. To Debbie or to Bobbye?

3 SMITH: It can go to you and we'll figure it  
4 out.

5 LOWE: You can send it to me.

6 NOVELLY: We will send a list of the people who  
7 will be invited to the update presentation to the  
8 agencies before that presentation takes place.

9 And we've decided that it's okay to drop  
10 the 2-chlorethylvinyl ether and MTBE from the suite  
11 of analyses.

12 That's it.

13 BURIL: Okay. That sounds harmless. Does  
14 anybody else have anything else they want to bring  
15 up?

16 I've got only one thing. Debbie, we're  
17 going to miss you.

18 LOWE: Thank you.

19 BURIL: I hope you have a marvelous time over  
20 there in China. Are you going to visit Japan, too,  
21 or just China?

22 LOWE: We'll see. I'm open to all kinds of  
23 possibilities.

24 (Discussion held outside the record.)

25 LOWE: I think we should set up a conference

1 call.

2 BURIL: Beyond the one that we're planning for  
3 next week?

4 LOWE: Yes.

5 BURIL: Okay.

6 LOWE: We used to do, what, first Thursday of  
7 the month?

8 BURIL: JPL is not open that day. That's a  
9 facility holiday. I'm looking at July.

10 LOWE: I'm thinking in July.

11 BURIL: It would be this next one next week?

12 LOWE: Yes. So I'm looking at August and really  
13 looking for an update on the perchlorate situation  
14 at that time.

15 BURIL: Okay. The first Thursday I'm not here.  
16 I'm on vacation that day. But I'm not critical. If  
17 everyone else is available, we can certainly do  
18 that.

19 BISHOP: I'll be somewhere else, of course.

20 LOWE: Do you want to try for a different day,  
21 Chuck?

22 BURIL: If you could do it the following week,  
23 it would be appreciated. But like I say --

24 LOWE: Are you out the entire week?

25 BURIL: I'm on vacation that week.

1       LOWE: Oh. Sure.

2       SMITH: On the Thursday I don't care as long as  
3 it's in the afternoon.

4       LOWE: The 14th?

5       BURIL: Say --

6       LOWE: Not at 10:00.

7       BURIL: In the afternoon? 1:30?

8       SMITH: Fine.

9       BURIL: Why don't we say 1:30 on the 14th for a  
10 conference call. That's the 14th of August.

11       SMITH: And I'll sit in if --

12               (Discussion held outside the record.)

13       BURIL: Do we want to set up the next RPM  
14 meeting time as well, as long as we're all sitting  
15 here with calendars?

16       LOWE: Knowing not who is going to be taking  
17 over this site, why don't we just set up a general  
18 like time frame and then have Kathy call around.

19       BURIL: That's fine. Let's see. Three months  
20 hence would be August -- no. September.

21       SMITH: September.

22       BURIL: September. You're right.

23               The second and third weeks in September I  
24 will not be here at all. I will be cross country.  
25 So either the first of the week of the 1st or either

1 of the remaining two weeks.

2       LOWE: I guess it just depends on what's going  
3 to happen with the perchlorate and how quickly we're  
4 going to want to meet.

5       BURIL: Might I suggest that earlier is probably  
6 better than later.

7       ROBLES: 4th.

8       BURIL: Shoot for, say, the week of the 1st,  
9 with September 4, a Thursday --

10       ROBLES: As a target.

11       BURIL: -- maybe being the target.

12       LOWE: Why don't you start Kathy doing phone  
13 calls around August 11th or August 18th, somewhere  
14 around there, aiming for the first week in  
15 September.

16       BURIL: We'll start that on our next conference  
17 call. That will be our trigger. Have Kathy that  
18 date start calling around to see if we can get  
19 September 4th as the appropriate time.

20               Where? Here again? EPA headquarters?

21       SMITH: If I have an RPM it will make sense for  
22 it to be here. We'll commit to it being here.

23       BURIL: Here?

24       SMITH: Yes. That's fine.

25       BURIL: Whoever would like to go on the tour is

1 welcome to. I guess overall, if there's nothing  
2 else, I guess we're done. Great. Thank you all  
3 very much.

4 (The proceedings adjourned at 2:25 P.M.)

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